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**THE JOURNAL**  
**of the**  
**INDIANA STATE MEDICAL ASSOCIATION**  
DEVOTED TO THE INTERESTS OF THE MEDICAL PROFESSION OF INDIANA



ISSUED MONTHLY

Under the Direction of the Council



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# THE JOURNAL OF THE INDIANA STATE MEDICAL ASSOCIATION

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Happy New Year

# THE JOURNAL OF THE

## Indiana State Medical Association

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# THE CANNING PROCEDURE

• Some misunderstandings exist as to the mechanics of the commercial canning procedures. Although some such information is available (1) (2), it is not surprising that the facts are not more generally known. The art of canning has been largely developed by, and retained within, the industry.

Of necessity, canning procedures vary with the product packed. However, it is possible to indicate in broad detail the treatment to which foods may be subjected during canning.

## Cleansing Operations

Raw materials are given a thorough water cleansing, usually by washing under high pressure sprays.

## Preparatory Operations

Following washing, undesirable stock is removed by sorting, trimming, peeling and coring operations, as occasion may demand. With some products these operations are performed mechanically.

## Blanching

Certain products are "blanched" or scalded by immersion in hot water. This process serves not only to clean the product further,

but also to soften the tissues and expel air therefrom.

## Preheating and Filling Operations

Here practice varies with the product. Sometimes the food is precooked and filled into cans; again, it may be filled into cans and hot water or hot salt and/or sugar solutions added; still again, the filled cans are "exhausted" in a steam or hot water box. All these operations, the majority of which are mechanically performed, serve to preheat the product and exclude air from the cans.

## Sealing, Processing and Cooling Operations

The filled cans are hermetically sealed on an automatic "closing" machine while the contents are still hot; the sealed cans are then heat processed to destroy spoilage micro-organisms; finally, the cans are cooled in water or air. Cooling contracts the contents and produces a vacuum within the can.

Such are the broad details of the canning procedure. We trust this brief word picture will bring better understanding of the treatments to which canned foods are subjected.

## AMERICAN CAN COMPANY

230 Park Avenue, New York City

(1) 1924, Commercial Fruit and Vegetable Products,  
W. G. Cruess, McGraw-Hill, New York

(2) 1924, A complete Course in Canning,  
The Canning Trade, Baltimore

*This is the eighth in a series of monthly articles, which will summarize, for your convenience, the conclusions about canned foods which authorities in nutritional research have reached. We want to make this series valuable to you, and so we ask your help. Will you tell us on a post card addressed to the American Can Company, New York, N. Y., what phases of canned foods knowledge are of greatest interest to you? Your suggestions will determine the subject matter of future articles.*



**The Seal of Acceptance denotes that the statements in this advertisement are acceptable to the Committee on Foods of the American Medical Association.**

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### ORIGINAL ARTICLES

#### THE INSANITIES OF FAMOUS MEN\*

LOUIS J. KARNOSH, M.D.  
CLEVELAND, OHIO

What is genius? Kretschmer, the famous German psychiatrist, pondered much over the question and answered it thus: "We shall give the name of genius to those men who are able to arouse permanently and in the highest degree that positive feeling of worth and value in the widest group of human beings. But we shall do so only in those cases where the value rises with psychological necessity and out of the special mental structure, not where a stroke of luck or happy coincidence has thrown it into his lap.

"It consists not only in an indispensable endowment of great gifts but also in a strained, dynamic quality of spiritual forces. The genius is essentially a producer of new and original things, the producer of personally stamped, special values."

No man has yet isolated or discovered the ingredients which characterize genius. Students of human biology have shown that the genes which hold it can exist side by side with low mental development. Intelligence does not make it, and intelligence can thrive without it. Somewhere its kernel lies in that thing called temperament, and somewhere in this same matrix of personality lies that which is called madness or insanity. Hence insanity and genius have in them a common denominator, and insanity and genius very often are chance bed-fellows in the same mind and body.

Kretschmer has given medical science the clearest elucidation of temperament in his famous book, "Physique and Character." He has divided all human beings into two great biotypes—the cyclothymes and schizothymes. In order to understand his conception and analysis of genius, it is necessary to explain the

structure of normal temperament, because genius is a peculiar blend or crossing of normal biotypes.

*Cyclothymes* are those people who can throw themselves into the world about them with great emotional or affective gusto. They are possessed of open, sociable, spirited, kind-hearted natures—whether they seem to be at one time more jolly or at another more cautious, comfortable, or even melancholic. They are the sensual enjoyers of life, of love, of music, and the changing color of things. Psychomotility, i.e., the ease of talking and acting, has a fluid-like property, now quick, now slow, but always adequate to the stimulus. At one time a gayety and elation may spontaneously arise, only to give way easily to apathy and melancholia. People with such an elastic mood are called syntones by Bleuler. Well-knit, both mentally and physically unified in response, smooth, not jerky, predictable in jollity or depression of mood, superficial in many ways, but forceful, vigorous and vital always, the cyclothyne is better sensed than logically understood. Physically this type is solid and compact, hence the term pyknotic—possessing well endowed vital organs and lusty endocrines.

The *schizothyme* on the other hand has a tendency to autism, to a life within himself, to the construction of a narrowly defined individual zone of dreams and purposes. He is emotionally rigid or lame. He is jerky, unpredictable in response, often sullen, inflexible, asocial and individualistic. At best he stands out as a little odd or eccentric. Life to him is subjective; he is a mystic and an emotional recluse, directing what emotional resources he may possess into a cold, hard determination, unfeeling to immediate situations, somewhat humorless, wearing a poker face, highly principled frequently, and often as not somewhat bigoted and coldly calculating.

These two main biotypes are general delineations. Each in turn is graduated in a quantitative way on a scale which determines the subdivision of temperament. The cyclothyne runs a scale of mood and is conveniently subclassified into three levels. At the highest level is the hypomanic temperament, characterized by an over-lively spirit, extreme spontaneity, a tendency to easy exaltation, clownishness and frequently a juvenile-like impulsiveness and hasty

\*Presented at the annual banquet of the Indiana State Medical Association, Gary, October 9, 1935.

action. Extremely sensual, sensational, noisy, obtrusive, and scatter-brained, we recognize this characterology in the effervescent romancer, the noisy, bustling fuss-budget, the brawler, or the superficial wit. In the middle level of cyclothymia is the broad-expansive humorist, the good-natured, easy-going, tolerant, passive citizen, the realist and, in the gifted members, the excellent copyist, the energetic Babbitt, the empiricist, the tireless executive, and the efficient lodge-brother. In the lower scale of mood we observe the stolid, sober, but sensually comfortable, non-obtrusive, somewhat melancholic and phlegmatic person who gravitates by reason of this sober mood into the solid, non-committal, substantial, law-abiding, docile and easily satisfied shop-keeper, small professional man and craftsman.

Let us now subdivide the schizothyme. Since his mood or feeling tone is weak or rigid, it is obvious that he cannot be scaled in gradations of this quality of temperament. He can be graded according to the degree of his sensitivity, for this seems to be the modifiable substance in his temperament. Accordingly, we have at the highest level the very touchy, hyperesthetic fellow whose sensitivity is that of a photographic plate. The slightest remark touches his egocentricity and causes him to blaze into an explosive tension or a sullen mulling, or an exaggerated withdrawal from human contact. Possessed of exquisite self-consciousness, his social rapport is poor, and his inner life knows little tranquillity. In the byways of everyday life he appears as the neurotic, the touchy, self-conscious egocentric, the moody, sullen, self-centered and paranoid eccentric.

In the middle zone of schizothymia is that large class of colorless, apparently unfeeling, recessive and logically minded people who are not swayed by the passing gusts of passion or hate, who shrink from harsh contacts, preferring to live colorless, monotonous lives, adhering to a systematic and fairly rigid schedule, and demanding little of color, drama, change, and excitement. They are spare in their appetites, formal in their beliefs, and orderly in habits. Here we find the timid soul, the aristocratic Englishman, the quiet villager, the clerical drudge, and the isolated farmer or backwoodsman.

On a lower scale of sensitivity is the cold, unfeeling idealist, driven by a ruthless, unfeeling, and therefore often faulty logic. Here we find the despot, the cold fanatic, the highly principled prude, the cultist, and the eccentric faddist. In concrete form we have him as the world-hostile misanthrope, the reformer, the religious bigot, and the humorless eccentric.

We now have the main structure of what Kretschmer calls his psychobiogram of temperament. *Geniuses are strange alchemies*, as far as we can tell, of these six forms of personality. Cyclothymic elements wage ceaseless war with schizothymic components in the same individual. Biologically speaking, geniuses are hybrids and more specifically they are hybrids resulting from luxuriation of hybrids. This means that they are the products of cross-breeding of two culturally and temperamentally different racial strains.

Kretschmer has shown on a map of Europe that genius occurs most frequently where the schizothymie Nordic intermarries with the cyclothymie Alpine or the modified cyclothyme of the Mediterranean type. Hence the greatest number of geniuses appeared in Northern Italy and in Southern Germany. While the pure Nordic schizothyme may often become a military wonder, a great explorer, or a poet of pathos, the real genius in the plastic arts, in sculpture, in painting, in music and in drama can only occur as a cross between the warm, cyclothymie Alpine and the cool, detached and sensitive North European.

Again it is necessary that the stock contain a long succession of well-bred ancestors to some degree. Woods has shown that of 3,500 eminent Americans, the actual statistical frequency of relatedness of these with each other corresponded to a probability of one in five, while the mathematical probability of any ordinary American citizen being closely related to one of these eminent men was only about one in five hundred. That inherited dispositions and not environment are the essential causes of highly talented performances can be regarded as proved.

One more point was brought out by Kretschmer, namely, that genius often appears toward the end of a process of attenuation of the stock, implying by that that geniuses rarely have gifted brothers, sisters, sons or daughters, in fact the rule being that these are often inferior. In analyzing the life of Goethe he has portrayed the fact that his sister was a hopeless neurotic or was insane, and his own offspring died early in life.

Because of all this, perhaps, genius is fascinating. The sporadic interplay of schizo- and cyclothymic temperament is capable of producing the garbled mood which rises to sublime heights in the epic, the sonata and the drama, just as often as it plunges the individual into violent hates, sullen moods and unfathomable taciturnity. No placid, comfortable and balanced cyclothyme or mid-level schizothyme can ever be a genius. Those who dwell at the extremes or contain the warring cross-fusions of these are eligible.

It is this dualistic personality which leaves us all aghast with wonder, appalled with horror or bewitched with admiration. Whatever genius does or says, he is a meteor who is bound to create a commotion among us commonplace human planets who follow an orderly orbit—and it is such commotion which we choose to call fame.

#### SCHOPENHAUER, THE APOSTLE OF PESSIMISM

Schopenhauer's father was a counting-house drudge who hoarded money, for that was the only thing he could do well and with satisfaction. He hungered wistfully on the sidelines for a place in the passing parade. Like most schizothymes, he hungered in vain. He must be credited, however, with having made a desperate attempt, for when the torpid forties were upon him he married a lively girl of twenty-two. She was a brilliant, bubbling cyclothyme, liked and attracted the company of smart talkers and doers, but she disliked everything about her husband except

his ability to provide a nice living. Here we have the blend that made a Schopenhauer but did not assure a happy marriage, since very soon the old man found surcease from his inner torments by drowning himself in a Hamburg canal.

The wife's disdain of her husband was then directed to her unwanted son. With dogged persistence, young Schopenhauer clung on the outer periphery of poets and philanderers who came to sit at his mother's feet in Weimar, and with increasing petulance she drove him off. He had too much of her own dash and dynamics to be induced to follow his father into counting-house or muddy canal. Two people with the same degree of cyclothymic verve are likely to clash violently, and the young man and his mother quarrelled incessantly. His contests with her gave much exercise to a sharp tongue and a bad temper. Although he acquired his mother's surges of elation and depression, he suffered greatly after their many altercations, because, unlike her, he was in addition wretched with poisonous introspection and extreme schizothymic touchiness, for he possessed all the asocial infirmities of his father. In short, his mother forgot, and he brooded.

Very soon he took to dry schizothymic generalizations, all heavily tintured by pessimism and hate of women. He studied medicine for one year but soon relapsed into philosophy. Nobody read his first and most ponderous work, "The World as Will and Idea." His publishers used it as scrap paper for packing. This must have pained him greatly, for this was the very prediction he had made of his mother's writings some two years before at the foot of those famous stairs in Weimar down which she had pushed him headlong after a final brawl. "Madame," he had exploded, "you shall only be known to posterity because I am your son. My books shall be read when butchers are using yours for wrapping pigs' knuckles and sauerkraut!"

Schopenhauer's cyclic phases of over-animation were spent in hectic writing; the moods of depression were externalized as a morbid world-hate. "Life is a hellish business and I shall spend it in reflecting upon it." Well spoken for a cyclothyme, too, because he never knows what trick of mood shall seize him on the morrow.

Next to his own company, he preferred that of his poodle dog, whose face was habitually as long as his master's, and sometimes he found companionship in a flute which he played indifferently. The animals at the Frankfort zoo were far more congenial to him than any human being. He lived in a single room, which was usually bare of everything but a bed and a few hooks upon the walls. "Life is a business that doesn't pay expenses," was a comment entered into his little diary, in which he kept an accurate account of every penny he spent of his father's estate to the very day of his own death. Next to an item marked "For two rolls and a sausage, twelve pfennigs" could be found: "Existence when summed up has an enormous surplus of pain over pleasure."

Coming upon a man and a maid in a secluded corner of the city park he paused again to write:

"Since life is mainly suffering, the two lovers who are planning propagation of a new life are planning evil—their feeling of shame proves it!" Forever trying to escape the pernicious pangs of constitutional depression, which of course he did not know he had, he visualized will as a brutal task-master and life as an unsuccessful contest with ennui. He never realized that most men are blessed with an endogenous smugness and that only creatures like himself are compelled to externalize a sour mood through the medium of a sour philosophy.

"Don't come too near!" he screamed if someone suddenly confronted him. This homophobia he rationalized by explaining that the correct optimum of human contact is to stay at arm's length, for any distance less than that breeds mutual contempt and anything more causes unbearable solitude. For some peculiar reason, he liked all Englishmen and particularly distrusted Americans and Jews. Like all older schizoids he became over-defensive and paranoid. Continually fearful of being robbed, he concealed his paper money in the few books he possessed and put his loose change in the bottom of his ink well. His hair was cut only at long intervals because he writhed in a sweat of agony while the barber manipulated the shears and razor. His egocentric tensions became such that a loaded pistol accompanied him to bed, and because of fear of fire he never could be induced to sleep in an upper story room.

Paranoia always implies a sublime but distorted conceit. He collected and saved all newspaper comments about his writings. On his deathbed he insisted that his few friends bring their young sons to see him and explained: "I want the coming generations to remember me, and I want your children to be able to say truthfully and proudly: 'I have looked upon the great Schopenhauer.'"

In speculating upon an after life, he expressed himself as follows: "When people die and go to hell, they will probably be surprised to find that they are just as they were when they were on earth—and what more horrible punishment could anyone get than that?"

No utterance better than this portrays his character. Sensitivity made him an introvert and later a paranoiac; constitutional depression made him a pessimist, and the total ensemble gave us a philosophic genius.

#### VOLTAIRE, THE HYPOMANIC

Voltaire was born in 1694, the son of a notary prominent in French politics, and lived long enough to read the epitaphs upon the tombstones of all his friends who looked upon his nervous, strumous, puny body and said he would not reach maturity. His father was well past fifty on young Voltaire's natal day, and his mother was forty-three. Hence Voltaire often referred to himself as the family postscript. "But remember, my sires," he always slyly added, "our after-thoughts are sometimes the best."

A short religious education only served to make of him a ribald rhymster of Biblical themes. Contact with smart tutors made him astute in syntax, and

very soon he learned he had the gift of ridicule. Knowing the frailties of the priest from his school days and the foibles of the politician from observation of his father, he soon possessed a rich pabulum upon which to nurture his thorny wit. He stung with prankish brutality.

At seventeen he was a spoiled darling, a clever clown and a supreme psychopath. Physically he was a ferret-faced youth, extremely fidgety and eternally restless, who suffered much with insomnia and dyspepsia. This by no means slowed the tempo of his hypomanic temperament. In spite of sleepless nights and sour stomach, he was always ready to write a scurrilous poem at the drop of a hat. Strangely enough he never resorted to opiates to stem his constant restlessness nor did he imbibe of something "for the stomach's sake." This probably saved him from a dipsomanic's fate. Moreover, he never took to rationalizing his vegetative upsets by nursing a hypochondriasis or an inferiority complex.

He polished off his education by taking a compulsory post-graduate course in deviltry at the Bastille. To show his amazing range, while sojourning in those dungeon class-rooms, he translated portions of the Bible from the original Greek and trained a group of fellow jailbirds to present a drama of his own construction, so pornographic in its quality that the socialites of Paris stormed the Bastille to see it.

Feared by cavalier, priest, politician, and all parasites living on the common weal, his verbal barrage approached uncomfortably near the cushioned chairs of Versailles. The French regent, who hoped thereby to lure him into a life of apathy and innocuousness, pensioned him at the age of twenty-two, not like Beaumarchais who was bribed to suppress pamphlets, but to abstain from writing them. To further this technique, he was hustled off to the Hague in Holland and given the position of secretary to the French Embassy. But it is too much to ask a hypomanic to sit and gracefully do nothing. There, unbeknownst to her pretty daughter, he courted a comely widow, and, unbeknownst to the latter, he courted the younger woman at the same time. When both affairs had reached the proper pitch, he proposed marriage to both (separately, of course) and eavesdropped upon them when they exchanged confidences. Pity that he did not record the emotional cataclysms which ensued, but he had no time for such notation, for that night he had to leave Holland.

This rare combination of clown, devil, and saint very soon relapsed into his habit of publishing poems which tormented men because they contained facts that stung and threatened obloquy. Tired of the monotonous menu of Paris jails, he left in exile for England to seek new pastures. There he met Swift and Pope, and sold many copies of his books, demonstrating that he was as clever in finance as he was in flirtation and fiction. This was partly inspired by his dying father's assertion that he was a ne'er-do-well and would be unable to handle his legacy. He proceeded then to corner the wheat market during the Franco-Italian war, and trebled his fortune.

With this capital he entered upon an insurance

scheme which should make Lloyd's sit up and take notice. "You shall have this loan," he announced after the necessary investigation of a young wastrel, "and you shall pay ten percent interest until either you or I die, and at this event the entire debt shall be cancelled. There shall be no payment on the principal. This should be a great inducement, young man, because you can see I am much older than you, and moreover a chronic cough has of late been a great source of discomfort to me." Voltaire looked like one who harbored a Koch infection, but do not ask how he seemed to know that he would outlive all his clients and make them the victims of his ingenious usury to the end of their lives.

Because his affair with Madame du Chatelet never entered beyond platonic depths, and because of his fascination for Frederick the Great, psychoanalysts snap up his life with the German emperor as a homosexual tidbit. Whatever it was, it failed to engulf the wily philosopher, but it certainly made Frederick an impatient neurotic—a situation which was far from displeasing to Voltaire. In exasperation, Frederick planned to have Voltaire married off to Catherine of Russia who had a happy way of poisoning off her rapidly discarded lovers. Voltaire was too clever to fall into this trap. "Nought but vexations arise from toadying the great, when all is done," could well have been said of each by each. Voltaire hied himself to Switzerland, the land of the unwanted.

In France, just over the border from Geneva, he founded Ferney, a town of shops, homes, recreation centers and hospitals—a town which even today is famous for its timepieces. From this pre-Fordian industrial Utopia, Voltaire, the brilliant hypomanic, continued to taunt prelate and politician, not because he knew their individual faults but because he had a rare intuitive knowledge of all the follies which beset men who sit in high places. In these surroundings Victor Hugo visualized him as the roustabout philosopher and epitomized it all with "Jesus wept, Voltaire smiled."

#### LISZT, THE MUSICIAN OF SORROW

Superlatives cannot describe the genius of Liszt, because superlatives can merely qualify the traits of ordinary men. Liszt was born in Hungary in 1811, and was trained in his early boyhood by Hayden and Hummel. In the great hall of an Hungarian noble, Hummel played the Concerto by Reis in C minor. As he dismounted the platform to receive the gratulations of proud ladies and uniformed Hussars, the five-year-old Liszt slipped up to the piano and reproduced, note for note, inflection for inflection, the same composition—an anticlimax which was certainly hard for Hummel.

To Vienna, where all good Hungarians go, went Liszt, there to receive the favor and recognition of Beethoven. This was but a stepping stone to Paris where he landed when only thirteen years of age.

He was a proud, sullen boy, utterly indifferent to all adulation. A kiss from a fluttering female patron brought nothing but nonchalance. Even in adolescence he gloried in murky moods, and found great comfort in magnificently tragic gestures. One of these

was his love for the Countess d'Agoult. The situation contained all the necessary Melpomenian ingredients. She was twenty-one years younger than her husband and she longed for "somebody who could understand her." She wrote books in indifferent fashion, had three children, and studied music, but she knew all along that this was but a stop-gap to something more emotionally nourishing.

She was thirty and Liszt, the sensitive connoisseur of emotional pain, was twenty-three when they met, and pretended aloofness. The grand passion seized Liszt with ravenous hold. As he stood beside her at the open grave of one of her children while the near-senile husband was somewhere in the provinces, the syndrome of sorrow was complete and the treatment clearly indicated. "Death shall not divide us. Nor is eternity long enough to separate thee from me."

He fled with her to Switzerland and the injured husband—let it be told—gave a banquet in honor of the event, but the rest of Paris was in an uproar. There ensued for the fugitive pair a carefree gypsy life, in company with the incomparable George Sand—no mean collector of maverick mates herself. This strange triad became a familiar scene to the goat-herds and townspeople of the Alps. Secretly stealing into a village church, he played the organ. "Our church is doubly sanctified," exulted the simple folk, "for the Angel Gabriel is playing." But the pseudo-Gabriel at other times succumbed to the impulsions of kleptomania and innkeepers counted their silverware after he and his strange company left.

Three children were born of this union of Liszt and the Countess. It is worth mentioning that one of the daughters became the wife of Richard Wagner and a second married a famous statesman.

The shrouds of melancholia tightened more frequently about him. He became morose, irritable, taciturn and ugly. Liszt and the Countess parted—a schism which he believed would break her spirit. It only gave him another occasion for an orgy of sorrow which he thoroughly enjoyed. Made of tougher matrix, she went south to Italy where she wrote a matured grade of poetry and translated Emerson's "Essays" for the breakfast tables of Europe. When she died, Liszt took on the robes of monkhood—a garb in keeping with his deepening depression. Religion, however, was no antidote—music was the elixir needed, not to cure his sorrow but to make it an exquisite gesture and an elegant pose.

He toured Europe and the crowned heads in their regal boxes applauded. Success did not temper his mood, even though he was worshipped by a stolid, pudgy but wealthy German noble-woman who pursued him from capital to capital for ten years before she ventured a proposal of marriage. He pointed to his abbe's robe and sadly declared that marriage was not for such as he. "I can obtain a special dispensation from the Pope," declared the persistent Princess Wittgenstein. "Very well," he answered, but rumor has it that he dispatched a messenger to Rome to advise the Pope to turn down the plea of the love-struck princess. None the less he lived in her palace,

studied in solitude, and composed there his famous symphonies—most of them divine externalizations of the dark melancholic mood which stamped him as the great "musician of sorrow."

#### BEETHOVEN, THE DEAF

The genes have a habit of pouring along the chromosomes, sometimes scorning to confer any decent traits whatsoever on an individual but lavishly endowing them all upon his offspring. Hence the fathers of brilliant men are lazy, good-for-nothings which for the sake of contrast is a good thing; the end justifies the means, and the world has Beethoven and his matchless music.

Beethoven's grandfather was a famous musician of Antwerp and later a Kappelmeister at Cologne. He planned a great future for his grandson but died shortly, leaving young Beethoven at the mercy of a drunken father. The child played the clavier in saloons and was rewarded more often with beerly applause than with coin of the realm.

Awkward, ugly, if not actually repulsive in appearance, he was nevertheless physically sturdy and survived successfully the drunkard's-home complex, and at eighteen set forth to seek Mozart's favor in Vienna.

Beethoven was a master of a ductile mood. To be easily led to tears, to ride in sudden flights into heights of ecstasy, to reel suddenly into ditches of despair may be the hallmarks of a neurotic, but to possess this lability and to be able to translate it into music makes a genius and makes his compositions pleasing to the man of the street. Very soon the music halls and "gast-houses" of the Ringstrasse rang with the catching harmonies of his ballads and lyrics.

At twenty-eight he became deaf—probably a form of otosclerosis. Slowly and unconsciously he compensated for this sensory deprivation by watching the lips of his friends, and for a while he thought he heard better than he actually did. Being a sociable syntone, he suffered from bitter loneliness. "In solitary exile I am compelled to live. When I approach strangers a feverish fear takes possession of me. In me there is no longer any recreation in human contact, no sweet interchange of thought," he wrote to a friend.

He burst into song upon the streets. He talked too loudly even to himself and this, coupled with his strange physical appearance, made him the butt of passersby. Suddenly sensing the situation, he fled in terror to retire to his room and weep. At least on two occasions he was arrested on the charge of drunkenness.

Art was his solace in the agonies of sensory deprivation. Art was his mainstay when he would otherwise go mad with suspicion and fear that lips moved to talk about him and against him. In the confines of his cloistered soul he composed his "Moonlight Sonata" which he was destined never to hear.

Psychosis of sensory deprivation is an imposing diagnosis. It justifies no sentimental grief for Beethoven. His social inclusion gave him time for pensive thought and private moods which were sublimated into beautiful song and exquisite music.

## MICHELANGELO, THE UNUSUAL GENIUS

Michel Agnola Buonarrotti became Michael the Angelo (Michelangelo) because he created a marble cupid so fine in proportion that men looked upon it and could only call it the work of angelic genius. He accepted the pet name with a mixture of dry humor and pride because he himself was ugly, drab, taciturn and a hopeless idealist. His lack of human softness and his extreme asceticism suggested that he was a hangover from the Middle Ages—except that from his fingertips came the incomparable and perfect marble figures and canvases destined to enthral the world.

Unlike Leonardo d'Vinci whom he hated because Leonardo was a social lion, a gallant horseman, and a lover of women and colorful attire, "Mike" was homely, cold as to exterior, a poor conversationalist and a proud schizothyme. But schizothymes are rarely painters because they lack warmth, and he had absolutely no compassion or patience with the sensibilities of the Renaissance. It is apparent then that with his lack-lustre exterior he possessed inwardly the fire of art and the new-born life of Northern Italy.

He is that very rare type of genius which produces much, lives sparingly and long, and is not marred by excesses or debaucheries. A combination of cold schizothymia with the energy and enthusiasm of a busybody cyclothyme—hence, out of this material came the deep feeling of the painter and sculptor; the sensitive pathos of the sonnet writer; the cold calculations and painstaking precision of the architect and engineer—in short, the universal genius.

He certainly was not a gentleman. A shower of chips deliberately directed against them greeted curious visitors who came to see him carve his statue of David out of the crude rock. He continually persisted in affronting polite society, insulting the Pope, and ignoring his admirers. He worked like a pack-mule and lived like a hermit.

He never painted a laugh—he didn't have the passion behind one! Life to him was a cold and perfect ideal, which, however, he never found except in his paintings and sculptures. His subjects were always heroic and sublime—awesome perfections which only a dreamer could create—and only in dreams. The soft, the pretty, the natural were strange to him—his men were gods and his women bloodless Amazons.

At eight years a jealous fellow-student let fly a sculptor's hammer which struck "Mike" on the nose, bestowing upon him a gruesome deformity suggesting congenital syphilis, serving to make him a more hopeless introvert.

Kings did him homage, Popes catered to his every whim, his fellow-artists were overawed, and people lifted their hats—but he never smiled, for all these gestures to him had an empty meaning.

He worked best when alone and his aids led a dog's life. Up under the ceiling of the Sistine Chapel he labored for three years creating a series of Biblical figures in perfect proportion and perspective, seventeen feet high and seventy feet from the floor. This

colossal task gave him a wry neck, and gave the Pope many anxious moments for fear that Michelangelo would fall through the scaffolding and leave the job uncompleted. Only a knowledge of finest mathematics and a matchless skill made it possible—only a combination such as he had could do it. Kretschmer states that a century produces only two of his kind—the rarest of hybrids.

Clement VII assigned him to create the tomb of the Medicis. Seven different times he left in high pique for the north and had to be cajoled to return to the task. Paul III induced him to paint "The Last Judgement," and shortly thereafter to round out an amazing life of eighty-nine years by "rounding Peter's dome." This, as the poet would have it, he "wrought with sad sincerity." This is not quite true, because he was no more capable of being sad than he was of being glad. His mood was as inflexibly schizothymic as his principles of living and working—at least as far as external evidence was concerned. He had a "sad sincerity" but it never became a sickly sentimality.

## REMBRANDT

The Dutchman, while he is primarily of Teutonic origin, is a happy admixture having the stolidity of the German and the temperament of the Celt. The Lowlander lives close to the green verdure of his soil. He is an epicure, a whole-souled liver—a realist, not a mystic or an impractical idealist. This frankness with frailties and faults, with facts and not fancies, with things as they are, has made the Dutch artisan and artist a devotee of nature and humanity unadorned by sanctity, pretense, or austere mysticism.

Italian art, which dominated Europe for three centuries, sprang from the classicism of Greece and was nurtured by the monasticism of Rome. The Bible and Olympus furnished the inspiration until under DaVinci its severity was softened by the glorification of human anatomy, whereby the body became less of a symbol and more of an actuality in itself. What the Florentine and Venetian schools of art did for anatomy, the Flemish and Dutch artists did for pathology. After the Italian ventured into the dissecting amphitheatre, the painter of the Low Countries entered the sick chamber, the insane asylum, and the autopsy room.

Heavy jowls, folds of fat, many wrinkles and noses studded with dilated venoles appear in place of the stiff and placid expression of a *Mona Lisa*. The fact that southern art called the Lowlanders boorish did not disquiet them at all. They continued to paint men warped by deformities, acromegalous jaws and other anomalies. Fascia stretched tightly over frontal bones and faces distorted by misery and mirth spot the compositions of their canvases.

Of such matrix was Rembrandt—stolid, secure, sociable, and a lover of all things beautiful and glamorous—a good syntone. He drew pictures in the flour dust on the walls of his father's mill. The old man thrashed him for it and bemoaned the fact that his son did not want to be a miller of wheat. His mother knew, as all mothers do, that he would be a great painter—she saved her pin money behind the family

clock and sent him to Swannenburch, who soon became jealous of his gifts, and to the great teacher Lastman who dismissed him shortly because he had nothing more to give him. As a reward to his mother, he painted her over a hundred times—so that her face appears adorned as a princess, beggar, gypsy, flower girl, and slave.

He transferred this mother-fixation to Saskia, his wife, with whom he lived nine supremely happy years, even though a brace of offspring died at birth and only one survived nine years. When she died, his libido died within him, and desolation came down upon him in the form of a mid-life depression—as happens to many full-blooded syntones.

From Venice came, among other things, the fashion of painting "Anatomy Lessons." Dissecting amphitheatres were open to the public, the anatomy professors became social lions and they had themselves painted with their admiring students clustered about them. Rembrandt joined the crowd and painted "Anatomy Lessons."

The physician at Leyden, naturally being jealous of his rival at Amsterdam, called upon Rembrandt to paint him as professor in anatomy with his colleague at Amsterdam as one of his goggle-eyed students. The latter became enraged when the painting was viewed by a tittering public. In his wrath he went to Rembrandt, and in due time a second "Anatomy Lesson" was unveiled. It showed the professor of anatomy of Amsterdam equipped for business with scalpel and tweezers and working before a student body on a cadaver which bore the likeness of the great doctor at Leyden.

Rembrandt's curiosity and his zealous desire to be true to life drove him into every nook and cranny of Amsterdam, to the wharves, through the flower markets, and slimy streets of the commercial quarter. He haunted the slaughter houses to be able to reproduce raw flesh, and his painting of the slaughtered beef at Louvre gives us the bluish-red tint of muscle, the silvery sheen of tendon, and the flat yellow of fat with a fidelity that bespeaks hours of application.

Rembrandt's melancholia caused the decline of his popularity and wealth. In dejection, he took to the highways and painted hundreds of beggars. In these "ragged gentry" we see the unmistakable signs of vagabond's disease; one has the nose of rhinocleroma, several are evidently victims of rachitic and tuberculous spines, and one shows clearly the retracted scar of an old alveolar fistula.

He knew melancholia at first hand for he had it, and he depicted it well in the painting of King Saul whose psychosis at least in one trial was greatly relieved by the harp of David.

Rembrandt never completely recovered, although in the dull twilight of his depression he produced the famous "Night Watch." Steadily declining in vigor and ardor, he literally drew pictures upon the bar-room floor, and he died stripped of friends, possessions, and self-esteem.

BYRON, THE MAD ROMANCER

Life is said to be a conflict of opposites; emotions

and ennui are opposite ends of the pole of interest. The feeling for color only exists when compared to other colors; an odor constantly present ceases to be appreciated; the darkness of a room emphasizes the beam of light penetrating a key-hole; the good in life emphasizes the bad; truth accentuates error; and righteousness stresses sin.

Contrasts, opposites, and sudden changes are necessary to feed the primal emotional mind of man. Some of us are doomed to hunger more than others for the crash of cymbals, sudden paroxysms, lightning shifts of scenery and a whirling panorama. The dread of monotony, the fear of ennui, the flight from the plateau—these are the things which torment the romancer.

Like his father, "Mad Jack" Byron sought romance, and in so doing made it. Like his father, he was a true Dionysian—violent, ruthless, gambling recklessly with life, making at no time a tame compromise with anything, and acquiring fame or social ostracism or both with equal intensity.

He was born with a club-foot and his mother, a boisterous, emotionally infantile woman, called him her lame brat. The household was a thymic tempest. Winds of dark moods, storms of derision, hurricanes of hate alternated suddenly with calming currents of sympathy, remorse and protestations of love. Each thrived well in such mercurial atmosphere.

The village apothecary one day saw him standing at the counter and was aghast to hear the boy's request that no poisonous potions be sold his mother because he feared she would do away with him. The druggist was more than aghast when a few hours later the mother came in to express the same paranoid fear of her eight year old son.

At ten he became a lord. Determined to cure his deformity, he gave himself up to the tender mercies of a group of London quacks who tortured him with braces and splints—but to little avail. The "lame boy" then entered Harrow and there he attained distinction in all the arts of dissipation and iniquity. He took lessons from a pugilist, engaged weekly in pistol fights, had bouts of crying alternating with bouts of rage, drank everybody else under the table, and kept for protection a tame wolf and a bear constantly at his side.

His writings are the product of surges of wild impulsion. When focusing his magnificent capacity to hate upon the Scotch critics, he radiated a power and a charm that swept everybody off his feet.

He married a woman of orderly and stable temperament—as most psychopaths do—and tormented her to the point of despair. He took a cruel delight in flaunting the conventions, and in overtly claiming that he was passionately in love with his own sister. Thanks to his dramatic poetry and personality, he had become at twenty-four and almost overnight the most glamorous "spoiled darling" in all of England. But four years later, unable longer to stomach his wild excesses and his cruelty, public opinion faced violently about and Byron became the most execrated and hated of men. To escape such hostility, he fled to the continent.

With a man servant, he frolicked from Spain to Mesopotamia, made love to married women, wrote poetry, and regained some of the health which he lost in his constant physical debaucheries. He made good his pledge to be arrested for misdeemeanor in every country through which he passed. He lived for a pause of eight years in Italy where he performed in the true Dionysian manner. What could be more natural, therefore, than that he should have responded with all of his passionate heart to the desperate plight of Greece, then heroically rebelling against her Turkish masters? Here, indeed, was emotional nectar and ambrosia for a psychopathic personality. As a poet, he felt impelled to rescue Mount Parnassus, and as the greatest showman of his time, he saw the publicity value of charging the Turks.

In the squalid, muddy, and pestilential village of Messolonghi, which Byron made immortal by dying there, he tried vainly to marshal the puny forces of the Greeks. Limping about the wet fields, his health weakened by a heart attack and by a constitution shattered by years of dissipation, he developed epileptic fits two months before he died, probably the effects of fever acting upon an alcoholic leucencephalitis. Like his brilliant counterpart, Edgar Allan Poe, a cerebral inflammation killed him. A giant among geniuses, of extraordinary and unforgettable physical beauty, he lived and died as do psychopathic personalities—the maddest romancer of the nineteenth century.

#### EDGAR ALLAN POE, THE MIGRAINOUS CYCLOTHYME

Nature torments and blesses one in cyclic rhythm. To those whom she gives the power to sway men, to charm and to scintillate, upon these she also foists the agonies of periodic dejection, self-hate, and sometimes adds the cephalic curse of migraine.

The Allans both died, probably of tuberculosis, when Edgar was an infant. From the mother, if we are to believe the recent studies on headache, he inherited the bittersweet of cyclothymic mood and migraine.

The leading character in the "Gold Bug" is described as having alternate moods of gaiety and depression, and fully a dozen other characters in his stories possess the same swinging quality in mood. Thus does a writer project his own deep qualities upon his characters, although he himself is unaware of their rhythmic and pernicious sway.

As many rhythmic cyclothymes do, so Poe became a periodic drinker, a dipsomaniac, who poured alcohol at regular periods upon the jagged pangs of recurring dejections, and knew not really why.

A disposition which at times was sweet, affectionate, considerate, that made him the lion of social gatherings, sank suddenly into moods of rationalization, irritability, racking headache, and a belligerence which nobody could endure; which drove him out of West Point thirty days after matriculation (although the Academy boasts of him now with a bronze tablet over the door where he lived) and which led him to debaucheries of drink and drugging—these are the phases which marked the man to

the very end when the gutters of Baltimore received him in toxic delirium.

We now know the poor man had migraine which his good doctors described as "recurring cerebral congestion," not a bad diagnosis at that, in the light of recent investigation. The deep sunken eyes, the wrinkles of pain in the brow, the shallow, delicate facies tell the story.

For three months at a time he disappeared from his usual haunts in Baltimore only to reappear in haggard, emaciated state, sometimes attired in nothing but a rubber slicker and muddy shoes. So rabid was his affliction, so ravaging the effects of drink, that toward the end the light of brilliancy, intense though it was, became blotted out more and more frequently by the clouds of depression and pain. A final bout resulted in cerebral edema.

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We may envy the genius, we may secretly hope that our germ plasm holds it to burst forth directly. This recital gives one pause to think, and to thank the fundamental forces for sparing us from it, for genius has a price!

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## ORGANIZED PROFESSIONAL ANESTHESIA\*

FLOYD T. ROMBERGER, M. D.  
LAFAYETTE

You who here are assembled are makers of living history. Living, because it is vital; it surges, it grows, it sets out to accomplish, it endeavors to improve its environment, and it strives for the well-being of others. Historic, because it is the first occasion in the annals of the Indiana State Medical Association when those of its membership eagerly interested in the art of anesthetic administration and, as a necessary sequel, in the organization of such services in the separate and respective hospitals of this, our sovereign state, here and now meet in Section conclave for the discussion of our mutual problems. We celebrate an anniversary.

Standing solidly and immobile upon the very fundamentals of medical practice, second in the United States and first and only east of the Rockies, this body has an unprecedented and unique opportunity for a brilliant leadership in professional anesthesia. If we strive!

It was not a sudden increment in the knowledge of anesthetic therapy which caused this to come to pass. Neither was it due to any benevolent effulgence in the discovery and application of the newer narcotizing and anesthetizing agents. Nor was it merely the selfish dream of idle fancy or playful imagination of any one individual. No! It was the inevitable and inexorable response to the quickened and aroused opinion, an enlightened professional opinion. You, each one of you, has played his or her part in this progressive and distinctive development. You, each one of you, each in his own hospital, each in his own

\*Chairman's address presented before Section on Anesthesia at the Gary session of the Indiana State Medical Association, October 9, 1935.

community, each in his own sphere of professional activity and influence, each one of you has proved to your professional associates and to the laity at large that the administration of an anesthetic agent is indeed and in fact medical practice. It has meant hard work, aggressive thought, and an eternally constant, scientific endeavor to aid and abet in getting your patients well. This you have done.

True it is that both laboratory and clinical research have progressed in recent years by prodigious leaps and bounds. True it is that the ever-prying, inquisitive eye of biochemistry has scrutinized the atom with ultra-microscopic exactness and that the illusive microbe battles vainly in defensive retreat. True it is that the physiologic processes have been vigorously pursued and that many of the most intimately hidden secrets of nature lay bare before us. Yet, as chemical and pharmaceutical manufacturers vie ceaselessly one with the other in the production of new drugs and new gases, and as daily we are bombarded and importuned to try this or try that or try the other until only the most sanely balanced mind can rationalize the flood-rising tide of claim and counter-claim, then, then indeed, must the physician anesthetist rise courageously to the occasion. For, let it here be emphasized without fear or favor, because a drug or a remedial measure or an anesthetic agent is administered with the best intention in the world, the conscientious physician is not in the least absolved from: (a) his moral responsibility of knowing that the drug or agent has a rational application to the problem in question, and, (b) his ethical accountability of being proficient in the particular attempt which he is essaying. In this, the highest exemplification of the anesthetic art, only the especially trained physician can serve.

But, we dare not stop there. Narrow-minded indeed would we then be. We must lend our knowledge, our influence, and every unselfish fibre of our cooperative spirit in the organization of an adequate, comprehensive, and complete anesthetic service for every hospital in our state, whatsoever the community in which we live. Should we say no? Shall we admit that it cannot be done? Decidedly, it can. The most insidious enemy to greater and still greater professional accomplishment lies lurking in the laissez-faire inclination to think that the plus-ultimate has been reached and cannot be improved. More than a subtle opiate and an ingenious defense-mechanism to a lazy conscience, this, indeed, is an incriminating admission of mediocrity. A perniciously wasting disease, he whom it seriously infects is mortally sick, mentally. His reaction-index is lowered. He slips, unknowingly.

The population of Indiana is 3,300,000. The number of physicians practicing here is 4,100, one doctor for every eight hundred people. One hundred and forty-five establishments are organized throughout our state to take care of the sick, approximately one hundred of them being general hospitals treating both medical and surgical patients. The remainder are institutions of more or less limited service, such as sanatoria, convalescent homes, prison hospitals, asy-

lums, or like establishments maintained by state or federal services. We have in this state twenty general hospitals with twenty beds or less. Thirty-five hospitals have more than twenty but less than fifty beds. Fifteen hospitals have between fifty and ninety-nine beds; twenty have between one hundred and one hundred and ninety-nine; while ten hospitals have more than two hundred beds, up to and over five hundred. What a field for the organization of a distinguished service! For all of us!

These hospitals did not spring forth overnight from the leafy woods or blossom suddenly in the grass-grown prairie as the answer to an utopian fantasy or a fertile romanticism. No. They were built as the acknowledgment of a positive demand, and they remain for us as an ever-insistent challenge for better and still better medical and surgical care. The intelligent laity of this state has been educated over a long period of years by the organized medical profession of Indiana into the opinion and belief that our hospitals have been established and are maintained for the public weal. Organized medicine well can be happy in this accomplishment. The people, our friends, have accepted this premise; now, it is up to us to deliver. Organized medicine, too, well can be proud of the high quality of medical and surgical practice as conducted in this state. Who among the active physicians of this great commonwealth would be willing to declare or admit or infer that we as individuals or as a group are insufficiently qualified or unprepared or unwilling to take care of such practice as originates within our communities, be our interest bonded to surgery, internal medicine, obstetrics, roentgenology, or what not—or to anesthesia. Bitter, indeed, in the mouth of the profession, then would be the acrid taste of ignoble defeat and of slyly approaching mental decay.

Does the surgeon of today call the common barber in surgical consultation or to perform surgical operations? No. Yet, barbers were the first surgeons. Does the general practitioner ask for help from the mesmerist, the brewer of herbs, or the chanter of witchcraft? No. Yet, in times gone by, these practiced medicine. Does the roentgenologist call a photographer to read his plates? Does the obstetrician call the midwife to apply forceps or do versions or Caesareans? Does the pathologist call the mortician to demonstrate gross pathology? No. Decidedly no. Yet they, all, easily could be taught the mere mechanical side of these techniques. How, then, about anesthesia?

Still further, almost in the words of the immortal Cicero, how long, how long will doctors permit collectivist outsiders to dictate or govern or control our public relationships? How long, how long will the organized medical profession of the sovereign state of Indiana suffer the persistent and insidious encroachment into our affairs by crack-pot third parties, by only too avid welfare workers, by glib insurance inveiglers, by crafty business arrangers, by ward-heeler politicians, by pink-hued theorists, and by long-haired, unwashed, leftist experimenters? We need a medical Reno for quick and positive divorce. The

theme-song of the chiseler and the grafted, no matter how roseate they paint the futuristic dawn, is the seduction of organized medicine into syndicated practice! For their profit!

That, in brief and yet in large part, was the psychology back of the action last year by our State Board of Medical Registration and Examination, and later by the House of Delegates of our State Association, in the long due and just recognition of higher anesthetic standards. Praise be, the profession felt that the time was here when Indiana boldly and firmly should assert that medical practice, whatever the phase, was the province of none other than the licensed physician.

With that decision, many duties and heavy responsibilities devolve upon us as anesthetists. Upon our shoulders is rolled the burden of proof that we are better than lay anesthetists. It is up to us to deliver an unqualified anesthetic service, each in his own community, or some one else will do it for us. Some one else will tell us how, when, and where, and at what price. How sad that would be! No! We will work, we will study, we will learn, we will educate, we will organize ourselves as individuals, as groups, and as to hospitals, so that never in the future may it be said to us that a patient or surgeon was in need of an anesthetic service and a competent physician anesthetist was not willing or was not available. Let us not bask dreamy-eyed in the drowsily warm sunshine of seeming success. The above has been reported from certain parts of our state in the near past, and it is being repeated in a subtle whispering campaign even today. As the intrepid Frenchman cried loudly at Verdun, "They shall not pass," so let us vow, right here and now, "It shall not be."

This means that we must go deeper than the grass roots; we must go down into the very soil which nourishes those roots. By our own ability and by our own conduct we must raise the standards of anesthetic service, both within and without the profession, so that in every community anesthesia will stand shoulder to shoulder with the other recognized specialties in medical and surgical practice. To attain this high level, the remuneration must be in a reasonably comparable ratio and an individual fee-basis system must be maintained, both paralleling other branches of medicine. Otherwise, we become merely the tongueless serf and eunuchoid slave. This two-fold purpose accomplished, anesthesia then will draw to itself its just and due proportion of the better-grade men entering medical practice. This is essential.

In our medical schools and hospital internships throughout the land, more detailed instruction must be given in anesthesia, and greater opportunities must be created for actual, practical application.

From this point on there should exist within our borders a large body of practitioners who have a better appreciation of what good anesthetic service consists, and, also, there soon would be developed an ample number of regularly licensed physicians sufficiently well trained to handle all the anesthesias needed

in their respective communities, regardless of the basis of practice. This is as it should be.

Every surgical center then could organize its anesthetic service entirely on a professional basis, both for the benefit of the profession itself and for the public weal. In many parts of Indiana this has been accomplished, almost with entire satisfaction. In others, opportunity still awaits. There are none which cannot be improved. There exists no such objectives as irreducible minimums or unsurpassable maximums.

It must not and cannot be assumed that any one slide-rule formula or that any one magic scheme of modus operandi will suit every community. Far from it. The patterns of service are too varied, and the cloth must be cut to fit each pattern. Much of the work, in any large anesthetic practice, is rather simple and perhaps routine, though each case is serious. Other administrations are highly technical and keen-edged, deserving of the highest artistry of our guild. Some communities and many surgeons ask for and easily are satisfied with the least. With minds closed, they close also their very eyes. Other centers demand, and in consequence get, the most. Some doctors and many institutions throughout America have been so long accustomed to lay control, to lay profit, and to lay administration of anesthesia, that they are immersed to the eyebrows in a stagnating slough of inaction and nonprogress. Both the profession and the laity have become immunized to the resulting mediocrity. With perception-threshold narcotized to the degree of numbness, smugness and self-complacency embrace them as if in the arms of Morpheus.

There is no universal panacea which, taken before meals or after meals or hypodermically at bedtime, will solve the anesthetic problems of the many and varied communities throughout this great state. It is utter folly to sit idly by, eyes behind dark glasses, mouth curving downward, and with an empty tin-cup in hand, and expect some passer-by to give you such a bewitching remedy. Depend upon it that, while you thus soulfully meditate, grim destiny with a stuffed club in nerve-twitching hands prowls impatiently at the neighboring corner. Yours is the decision; yours, the action.

The medical profession of each community must analyze its anesthetic needs and its surgical aspirations, then rationalize and idealize the fulfillment. Whatever the size of the hospital or hospitals, a thorough survey soon will lay a reasonable foundation for a substantial superstructure. How many surgical operations are performed per annum? What is the quality of the surgery? What anesthetic agent or agents best are adapted to meet the varying surgical problems? Which cannot be used? What is the anesthetic I. Q. of the surgeons, the anesthetists, and the laity? Depending upon the available volume, shall the service be, or can the problems best be solved, on a full-time or on a part-time basis? Or on a combination of each? Certainly each system has advantages; also, equally certain, each has its drawbacks. All three are needed in this state, right now.

Yes, it can be accomplished, all within the dictum that the practice of anesthesia actually is the practice of medicine.

If our present-day system of medical practice is justifiable and right, and those of us interested in the future of organized medicine so believe, then the basic principle of professional anesthesia is at once reasonable and sound. Simply stated, it is this: Just as the physicians of any given community are organized to take care of the peak load of medical and surgical practice, high or low, rich or poor, so, too, can they arrange the anesthetic service in that same community. If they are unwilling or unprepared, then the indictment is not against the problem of anesthesia; rather it is the profession, itself, as a whole, which is accused. Ignominiously, they dishonor and disown their community obligation. In any center, should doctors refuse to take care of surgical cases, someone else will do it. Refuse medical patients, and they will go elsewhere. Refuse obstetrics, and the answer is the same. Drastic antidotes are indicated.

Thus it may be asserted as a truism beyond any controversy that the practice of medicine in its entirety, in any community, in the final analysis is wholly within the hands of the doctors of that community. What they really want, they can have; what they actually have is what they have asked for. No more, no less!

We well may philosophize that we are living in a momentous era in American history, a period of accelerating change, one characterized by abscising reactions, inflammatory turmoil, economic derangements, political fractures, and social dislocations. 'Twas ever thus. Yet, time marches on. Yes, the phrase is only a terse and well-blazoned slogan. But he who runs may read in it the pathognomonic signs of that symptom-complex which we call today. Encompassed and condensed and compacted into those three simple words are all of the eagerness and earnestness, all of the passion and pathos, all of the drama and tragedy and by-play which have motivated the thoughts and psychic impulses of struggling mankind, even since the beginning of calculated time. Yes, changes indeed will come.

Only the dead are static. Art and music as we know them, literature and the academic sciences, domestic commerce and transportation, machinized industry and international trade, religion and the social philosophies, politics and the ever-changing theories of government, itself, all, all these are growing, living entities, all in constant flux, all pulsing and throbbing with the vital spark of life, coursing ever forward, seeking new and still newer horizons of accomplishment. And we call this thrilling extravaganza modern civilization.

In anesthesia, surely we must keep the faith, eagerly grasping, earnestly striving, painfully struggling, hoping, longing, seeking, wishing, yearning for those larger and better things which we know, inevitably, must come.

Only the alert will receive the dividends.

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## DERANGEMENT OF THE SEMI-LUNAR CARTILAGE OF THE KNEE\*

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The majority of knee injuries recover without any special form of treatment, and there are many cases in which the diagnosis is very difficult of differentiation and only too often impossible of accuracy. Dunn, in a study of 522 knee injuries, diagnosed 250 as lesions of the semi-lunar cartilage, but in thirteen, five per cent of the cases operated, he had failed to establish a diagnosis. It is, however, most important that every effort be made to determine the exact type of lesion in or about the knee joint, so that the subsequent treatment may be efficient and along proper lines. The diagnosis should not only be definite but should also be made at an early date as the simple lesion, easy of correction, if neglected may lead to such changes in other structures of the joint that a cure becomes difficult or even impossible. The simple hemarthrosis can produce a villous proliferation of the synovia with an associated chronic recurrent hydrops; the loosened semi-lunar cartilage following a tear of the coronary ligaments or the meniscus with a slight split may, following recurrences, lead to extensive changes in the articulating cartilages and to marked atrophy of the thigh.

As an instance of this, a young man, twenty-two years of age, struck his knee against a box. Swelling was immediate but not associated with much pain, so that he continued with his work. Four months later he had to stop work because of pain, swelling, and limitation of motion. At that time the knee joint was explored, and extensive villous proliferation of the synovia was found to have filled the entire joint cavity. A complete synovectomy was done and a perfect result obtained. Early aspiration of the hemorrhage within the joint undoubtedly would have prevented the changes found at operation.

The knee joint is somewhat complicated in its anatomical structure and the pathological conditions which may arise are many and varied. Simple sprains, contusions, bursitis, tuberculosis, syphilis, purulent arthritis, gonorrhreal infection, fractures into and about the joint, "joint mice" or loose bodies, tears and splits of the semi-lunar cartilage, rupture of the crucial ligament, avulsion of the tibial tubercle, hypertrophic and atrophic types of arthritis, synovitis, tears of the coronary ligaments, chronic hydrops, thickening of the fat pad—all are clinical possibilities to confuse the differential diagnosis.

### LESIONS OF SEMI-LUNAR CARTILAGES

Lesions of the semi-lunar cartilages are perhaps the most common of all types of injuries to the knee joint. If these cartilage injuries are diagnosed early and the proper form of treatment, either conservative or radical, is begun at once, the prognosis is excellent. On the other hand, if undiagnosed or if treatment is

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neglected, changes may occur in the other internal structures of the knee joint which make the prognosis poor.

*Case:* While at work in a stooped position, a young man twisted his knee. Pain and locking of the joint was immediate but function was restored by simple manipulation. The knee was not immobilized. Four days later the symptoms recurred and a diagnosis of a sprain was made. Recurrences of the pain became frequent and the swelling of the joint remained constant. Eventually there was a total disability and at this time the knee joint was explored. The semi-lunar cartilage was found to be split and there was a marked erosion of the articulating cartilage on the femoral condyle. The atrophy of the thigh was one and one-half inches. From a simple derangement of the semi-lunar cartilage, in which the prognosis was good for complete restoration of function had operation been done early, the prognosis was poor and the end result was one of considerable impairment.

The following discussion of lesions of the semi-lunar cartilage is based upon a study of fifty-one non-operative cases and sixty-six operative cases.

#### ANATOMY

The general anatomy of the knee joint will be assumed as known. Although the joint is largely one of the hinge type, there does exist some rotation between the tibia and the femur, the maximum of this rotation occurring between the angles of thirty and ninety degrees of flexion of the joint and with its center of axis over the external condyle of the tibia. Abduction and adduction as well as some lateral and antero-posterior motion is possible when the knee is relaxed in the flexed position. The stability and the strength of the knee joint is dependent almost entirely upon the power and the tone of the quadriceps muscle and the continuity of the patellar tendon. The part played by the lateral ligaments, by the capsule and the crucial ligaments has been overestimated as they enter into the picture of stability as a second line of defense. Rarely does one see a tear of the lateral ligaments or of the crucial ligament in association with a tear or derangement of the semi-lunar cartilage. One might state that the knee joint is only as strong as the quadriceps muscle.

The semi-lunar cartilages are avascular and also elastic. Attached fairly firmly at their anterior and posterior ends, the periphery is fixed to the condyle of the tibia in a loose manner through the coronary ligaments. A small range of motion both antero-posteriorly and inward and outward is possible. The attachment of the cartilages to the capsule of the joint does not apparently have any importance in relation to their injury. The slight lesions which simulate tears of the meniscus no doubt are strains or tears of the coronary ligaments, and they heal without leaving any permanent impairment.

The articulating cartilages of the femoral condyles are exposed to direct trauma when the knee is flexed and the patella rides high. Small areas of this cartilage may be bruised and become necrotic or a small portion may be chipped off. These small chips of cartilage with a portion of the underlying bone repre-

sent the beginning of joint mice or loose bodies. Their presence in the joint cavity gives rise to symptoms similar to tears of the semi-lunar cartilages.

*Case:* A girl, nineteen years of age, fell while playing tennis and immediately had pain and swelling of the knee. For several months recurrent attacks of pain, swelling, and loss of function occurred. A diagnosis of semi-lunar cartilage injury was made and the knee explored. The semi-lunar cartilage was found to be intact and was not excised. On the anterior aspect of the inner femoral articulating cartilage was found a piece of the cartilage which was about one quarter of an inch in diameter and which was still attached to the bone along its upper border like a trap door. This piece of cartilage alone was removed and the knee closed. All symptoms were relieved and the patient became a state champion in tennis the following year.

The functions of the semi-lunar cartilages are to deepen the upper end of the tibia for the reception of the femoral condyles, to decrease the friction between the tibia and the femur, and to absorb partially the shock through the knee joint. Whether these cartilage disks change their position through a simple, gliding motion or through a spring-like action is perhaps of no importance.

#### HISTORY

In no other phase of medicine or surgery is a thorough and careful history more essential for an accurate diagnosis than in lesions and injuries of the knee joint. This history should relate not only to the recent symptoms but should cover also all previous injuries and diseases. Relative to lesions of the semi-lunar cartilages notation should be made as to the position of the knee at the time of the injury, the onset of swelling, the amount and type of loss of function in the joint, the frequency of recurrences, and the tone of the quadriceps group of the thigh muscles. The age of the patient is significant in that lesions of the semi-lunar cartilages are uncommon in those younger than sixteen or older than forty-five.

In the initial accident, giving rise to a derangement of the semi-lunar cartilages, three elements are always present, *rotation*, *flexion*, and *weight bearing*. The rotation occurs between the tibia and the femur with the knee in a position of semi-flexion and with weight bearing through the knee joint. The mechanic arising from a stooped position of work, the athlete tackled in football, falling in basketball, or twisting in tennis, the civilian making a sudden mis-step from the curb or into a hole—all have a rotation of the flexed knee in weight bearing, the factors making possible a lesion of the meniscus.

Immediately following the accident, the patient has a sudden, sharp, severe pain in the knee and is unable to stand or to bear weight upon the leg. The knee is flexed to about thirty degrees and any attempt to fully extend or to fully flex the knee is impossible. The knee is "locked." Relief at this time may be had by some simple manipulation of the knee or the joint may be unlocked after several hours while the patient is lying in bed. Swelling soon

appears and tenderness is noted along the joint line and pain is referred to this region. In many cases the symptoms of pain and loss of function disappear after a few days of rest and in these instances the lesion probably has been one of the coronary ligaments rather than a tear or split of the semi-lunar cartilage, or there may have been only a pinching of the fat pad.

If the meniscus has been torn or split, or if the lesion of the coronary ligament has so healed as to leave a very mobile cartilage, recurrence of the initial symptoms takes place. These recurrent lesions may follow a very simple injury or may even come when the patient is at rest or asleep. Locking is not such a constant factor as in the initial lesions. The recurrences may be so frequent as to interfere with work or they may create a physical hazard so that the patient is afraid to be in traffic or to enter into the ordinary sports.

Injuries to the external semi-lunar cartilage are not so common as to the internal cartilage, the ratio being about one to six or eight. The symptoms, however, are similar but referred to the outer side of the joint. Not infrequently one is unable to determine definitely which cartilage has been injured. In a few cases both cartilages have been found involved in the same patient.

The following discussion will refer to the internal semi-lunar cartilage.

#### EXAMINATION

Immediately following the initial lesion the examination does not present many clinical features other than the pain, loss of function, and the tenderness along the joint line. Swelling may or may not be present at this time, but if found early, aspiration will show it to be a blood-tinged fluid. Rarely is there any swelling which can be attributed to extra-articular infiltration nor can one palpate the cartilage itself. Atrophy of the thigh is not present. The diagnosis will, however, be made on the symptoms of pain and the tenderness along the joint line and the loss of motion in the joint. Locking of the knee in a position of flexion is noted in perhaps fifty per cent of the cases, but there is always an increase of pain when full extension or full flexion in the knee joint is made. If locking is absent, it may be impossible to differentiate between a tear or split of the semi-lunar cartilage, or sprain of the coronary ligaments, or a pinching of the fat pad.

In the recurrent cases swelling is a more constant factor and locking of the joint is less frequent, but pain on full extension is always found. The tenderness along the joint line is still present, usually somewhat posteriorly. The history differs in that there may be only a trivial accident or even not any accident, the attack occurring while the patient is lying down or merely getting up from a sitting position. The most characteristic sign in these latter cases is the atrophy of the thigh muscles which is evidenced not only by a decrease in measurement but also by a flabbiness of the entire muscle group. This atrophy is so constant that in its absence one should

question the diagnosis of a derangement of the meniscus. The atrophy is not one of disuse but one of atrophic change in the muscles following a reflex action, as has been proved by severing the afferent nerves of the knee joint. It is this atrophy which accounts for the instability in the knee and makes difficult going up and down stairs. The amount of the atrophy is a very large factor in the prognosis. Inasmuch as loose bodies ("joint mice") will at times give pain, loss of function, and locking of the joint, an x-ray should be made to exclude this pathology.

#### TREATMENT

The initial lesion to a semi-lunar cartilage should always be treated in a conservative manner as not only is it impossible accurately to determine at this time the actual damage done to the semi-lunar cartilage or to exclude a simple strain of the coronary ligaments, but one should remember that all rotary strains of the knee joint do not require operations and that the majority of such strains become well without any special form of treatment.

The patient with a painful knee following a strain of rotation but without marked loss of function should have the knee put at rest in a light splint for a period of two to three weeks. If the knee is "locked," the knee is to be manipulated until the patient feels decided relief from the acute pain and is able to fully extend the knee joint. This manipulation may be done either with or without an anesthetic. The patient, lying on his back, brings the leg into flexion at the hip and at the knee. The operator with one hand grasps the leg about the ankle, and with the other hand grasps the thigh just above the knee. The patient is then told to extend the leg on the count of three, and at the same time the operator forcibly rotates the tibia inward and the femur outward and also completes the extension of the leg. If the cartilage is released from its pinched position, the patient will have relief from the acute pain and be able to extend the knee with but little discomfort. The knee is then fixed in extension by means of a light splint for a period of six weeks during which period weight bearing may be had. Following this fixation the thigh should be massaged and careful exercises given for several weeks.

If a reduction of the derangement cannot be obtained through manipulation, or does not occur spontaneously, or if there is a history of recurrent attacks of pain, locking, and loss of function, one may assume that there has occurred a definite split or tear of the semi-lunar cartilage. Inasmuch as the semi-lunar cartilage is avascular and repair of a true split or tear cannot be expected, the treatment becomes surgical and the cartilage is to be excised. This operation should not be deferred under such conditions as each subsequent attack not only creates a greater tear in the meniscus but particularly because the other joint tissues may undergo inflammatory changes, the atrophy of the quadriceps muscles becomes more marked and thus the simple cartilage lesion becomes a complicated picture with a grave prognosis. Further rational or conservative treatment is of no value.



Figure 1. Upper left cartilage, shows split fragment turned at right angles.

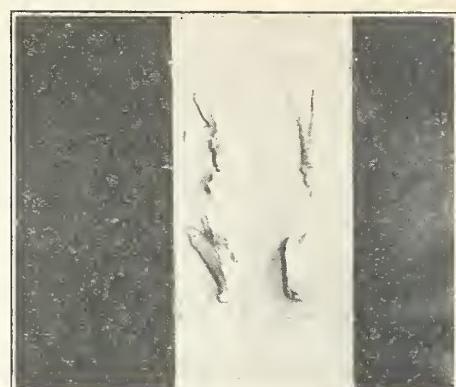


Figure 2. Lower left cartilage, shows slit portion turned at right angles and also small bud-like portion slit off. Upper right cartilage shows lesion in extreme posterior portion. Lower right shows slit in extreme anterior portion of cartilage.

#### OPERATION

Arthroscopy of the knee joint is a safe procedure and infection should be of low incidence if strict aseptic precautions in the preparation of the field of operation and in the operative technique are followed.

The operation is facilitated and the factor of infection lessened if a tourniquet is used. The leg should be so draped that the knee can be flexed to give a better exposure of the anterior chamber of the joint. The type of incision varies from the short oblique to the long longitudinal, depending upon the experience of the operator. The writer has for several years used the para-patellar incision, beginning at the upper border of the patella and extending downward to the top of the tibia on the inner side of the patella, and if a greater exposure of the joint is desired the incision is carried upward, curving to the midline of the quadriceps tendon. The incision should not be carried low enough to endanger the patellar branch of the internal saphenous nerve. Through this type of exposure of the joint one has a better view of the actual lesion in the semi-lunar cartilage and is also able to observe the other pathological conditions in the joint. Only too often the diagnosis before operation is wrong and the actual lesion is one of loose bodies, hypertrophic and fibrosed fat pad, bruising of the articulating cartilage or some form of synovial pathology. The knife used in the skin incision is discarded.

As the normal layers of soft tissue are exposed, they should be carefully isolated so that their suture later may be more accurate. The capsule, which is usually bulging through excessive joint fluid, is opened and the fluid, which may contain flakes of fibrin, is allowed to run out. Examination of the joint is made to determine other pathology than that of the meniscus. The anterior end of the semi-lunar cartilage is then loosened and grasped with a strong forceps. Tension is made upon the cartilage and any rent or hypermobility will be well defined. The cartilage is then cut along its periphery, as far posteriorly as possible, and removed. It is possible to leave a small rim of the cartilage attached to the capsule and also the posterior fourth without affecting the end result.

The removal of the semi-lunar cartilage now makes possible a more extensive examination of the joint for the presence of changes in the synovia, the fat pad, and the articulating cartilage. If the external meniscus is thought to be involved, an incision on the outer side of the joint will be necessary for its removal. If the fat pad is found to be hypertrophic or calcified, that pathological portion should be removed.

The joint cavity is filled with ether, the capsule and previously isolated layers of tissue are sutured with plain No. 1 cat gut, and the skin is closed with silk or dermol. In closing the capsule, the sutures in the lower angle of the wound should be so placed as to control the hemorrhage from the plexus of veins in that region. The wound is covered with an alcohol gauze and a large pad and the leg wrapped snugly with several layers of glazed cotton or cotton flannel bandage and then several layers of plaster of Paris to control the bleeding. The tourniquet is then removed and the splint finished.

#### AFTER TREATMENT

The patient will have considerable pain the first two days which must be controlled with morphine. At the end of the second day the splint may be split and the pressure released. If, at this time, there is found to be considerable swelling, the blood may be aspirated from the joint. On the fifth or sixth day the splint is removed and active motion begun in the knee, and on the tenth day the patient may be up on crutches. Weight bearing is applied gradually and regulated by the pain. At the end of the second week the patient should be walking with the aid of a cane. During the period of convalescence the thigh muscles should be massaged and exercises given to restore their tone. If pain and stiffness persist, it is better to give fixation for a short time rather than to force motion and weight bearing.

#### PATHOLOGY

Upon opening the capsule one finds an excessive amount of clear yellowish joint fluid which may contain flakes of fibrin. The degree of the lesion in the meniscus varies not only as to its site but also as to its extent. The anterior attachment may be loosened

and associated with only a slight slit between the two cornu which attach it to the tibia. This loosened end may be buried in the fat pad with fibrosis. The posterior end may be crushed and flattened.

The initial split of the cartilage is a longitudinal one with the bevel of the split somewhat oblique or slanting. In many instances this tear will not be observed until tension has been made on the loosened cartilage when the inner half will slide inward as the fixed outer half remains in place. The tear may be extensive following the initial injury or the repeated injuries may so further split the cartilage that the inner half is torn across and the torn end swings at a right angle to become attached in the intercondylar notch with strong bands of fibrin.

The deranged or split semi-lunar cartilage may be considered as a foreign body and as such can produce numerous inflammatory changes within the joint which Wallace and Permar enumerate as villous fringes in the synovial lining, hyperplasia and granulation of the synovia, congestion, vascularization and fibrosis of the fat pad, increase of joint fluid, pannus formation and destruction of the articulating cartilage.

#### PROGNOSIS

If there has been a simple tear or split of the semi-lunar cartilage, without an excessive atrophy of the thigh muscles, the excision of the meniscus should give an excellent result in that the patient can resume heavy manual labor or engage in the ordinary sports such as football or tennis. If there has occurred a marked atrophy of the quadriceps muscles then one must expect a long convalescence with a persistence of fatigue, pain, and instability in the knee joint. In cases of long standing in which the articulating cartilage of the femur has been eroded or shows some type of chronic arthritis, the operation will not be of great value and the permanent impairment will be considerable. From an analysis of the recorded experiences of many operators, one may state that in operated cases we may expect good results in seventy-five per cent, fair results in fifteen per cent, and poor results in ten per cent.

#### DIFFERENTIAL DIAGNOSIS

*Loose Bodies (joint mice).* The history is that of a direct blow to the articulating cartilage or a hemarthrosis of long standing. The locking of the joint is usually temporary and reduction is easily obtained by any movement of the knee. The pain may be referred to any part of the joint. Frequently the loose body may be palpated, especially to either side of the quadriceps tendon. Diagnosis should be made by x-ray examination.

*Sprains.* The tenderness is over the attachment of the tendon, either on the tibia or femur, and not along the joint line. It is to be remembered that the tendons lie somewhat posteriorly. Fluid within the joint is uncommon. The pain may be increased by abduction (internal ligament) or adduction (external ligament). Under anesthesia, the knee will fully extend as the muscle spasm is lost.

*Fat Pad.* Pain is more apt to be anterior—no locking occurs. The patient has a sense of instability in the knee. It is more common in late adult life.

*Over-use Arthritis.* This comes in later life in one who does some unusual exercise. It is associated with pain along the joint line on each side and fluid can be demonstrated in the joint.

*Fracture of the Patella.* History of direct violence. Tenderness over the patella. Considerable fluid (blood) within the joint.

*Torn Crucial Ligaments.* History of considerable violence. There is increase of either anterior or posterior motion in the joint. The joint is filled with blood.

*Avulsion or Epiphysitis of the Tibial Tuberclle.* Found between the ages of eleven and sixteen. Swelling, tenderness, and often redness over the tibial tubercle. No fluid within the joint.

*Fracture of Tibial Condyle.* Point tenderness along the fracture line. Blood within the joint. This is a lesion of hyper-extension of the knee (bumper fracture), and diagnosis should be confirmed by x-ray.

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#### DISCUSSION

LYMAN T. RAWLES, M.D., (Fort Wayne): As Doctor Mumford has so well said, "Accurate diagnosis is most essential in knee pathology." I want to accentuate that statement by saying that accurate diagnosis is imperative before any intelligent treatment can be instituted or attempted and, further, the conclusions that make that diagnosis can only be arrived at after history and examinations are carefully taken and made; then, compared with the anatomy and physiology of the part, we may arrive at a pathological diagnosis. This holds good in all parts of the body as well as with the bones and joints.

I have no criticism to make with any surgeon's methods of treatment by which he obtains good results. There are probably no standardized methods of treatment used in bone and joint work. There are certain laws to be respected in this line of surgery, the same as in surgery of the abdomen, etc. Each surgeon has his own methods of procedure and it matters little whether he uses plaster, braces, or any other method so long as his end results are gratifying. All are trying for the same end, and he is a wise man who knows how he can obtain the best results.

Dr. Mumford's discourse has covered rather completely one of the most common pathological conditions of the knee joint. However, it might be well to speak about the differential diagnosis of knee-joint conditions, and one of the most frequent is the entanglement of the synovial fringes that follow certain types of arthritis. These fringes become entangled and displaced in between the ends of the articulating bones of the knee joint; therefore, they become pinched during joint action. This causes pain of various degrees, from a sharp, agonizing pain to that of a dull character; or it may be described as an ache. There is generally an effusion following;

this may be small in amount or it may fill the capsule to complete distention, depending upon the amount of tissue involved, its vascularity and the power of resorption. It is recurring and usually is found in those patients with old creaking joints. Its treatment is rest, and splinting by some method which will limit joint action. In some cases aspiration may be advised under rigid antiseptic precautions.

The second type to differentiate are the "loose bodies—joint mice." This condition is usually easy to recognize if the bodies are free and floating about, but when that body is the end of a pedunculated fringe, the story is sometimes different, and diagnosis is not so easy. These bodies are usually cartilaginous pieces that are broken off of fringes following long, drawn-out, chronic arthritic conditions. These bodies may slip between the ends of the articulating bones and completely lock the joint. This causes a mild degree of pain that soon subsides and the patient may go on about his business. These people soon learn to find the offending body and by gentle pressure push it back where it will do no more harm for awhile. However, occasionally these bodies are not found so easily, and the services of a physician are sought to release the offending body, especially if it has become entangled with the crucial ligaments. The removal of these bodies is the surest manner of their disposal.

There is a condition that is sometimes overlooked by many of us. I believe that the condition of hyperplasia of the fatty tissue of the knee joint, Hoffa's disease, is vastly more common than is given credit by both clinicians and authors. In the normal knee we have fat pads that serve a variety of purposes, such as the maintenance of even temperature during exposure, absorption of shock, and the holding of the capsule of the joint at a normal tension which prevents injury during its normal function. The two fat pads that are most prominent are the one below the patellar ligament and the one under the upper part of the capsule, below the quadriceps tendon, lying on the anterior surface of the femur. Both of these fat pads are extra-capsular, and from the capsule are small appendages or tags of fat and connective tissue, connected more or less directly with the main body of the original fatty body. It seems that when these fatty bodies are injured by direct or indirect violence, there is set up an hyperplasia of that whole fatty body, thus transforming it into a neoplastic growth that interferes with locomotion: it becomes tender to pressure; interferes with knee action by its increase in size, and these patients suffer discomfort when they change from rest to activity. There is a more or less dry form of arthritis, and the joints have friction sounds that may be audible to others than the patient.

The stiffness of these joints, together with the pain, is different from those symptoms found in the ordinary garden variety of arthritics. The stiffness leaves after the patient becomes active; the pain is not severe, and it, too, leaves when the patient "gets going good and loosened up."

The tumor may grow to such size that it is noticeable on either side of the patellar tendon, and locomotion is greatly hindered. If the joint is opened, a fatty tumor that is a deep reddish yellow is found almost completely filling the anterior portion of the capsule. The blood supply is increased and the tumor, I suppose, may be classified as a lipoma, depending of course, upon the pathologist.

The treatment of this condition is divided into two groups, the conservative and the radical. The conservative treatment consists of waiting, resting, and the use of various supports by braces, strapping, etc. Under the waiting method the condition is gradually growing worse, slowly to be sure, but the increase of the tumor mass in the joint is invaliding the person more and more, until the joint becomes in a degree, functionless. The radical treatment consists of opening the joint, removing the offending pathology completely, and restoring the joint to normal in a few weeks.

Nearly all surgeons agree that all knee-joint cases that have been operated should walk as soon as possible. This prevents the forming of dense adhesions, atrophy of the muscles, and aids absorption by the stimulation of the circulation. In infected cases, walking about aids drainage and helps to prevent bone atrophy. I believe that one of the greatest contributions to post-operative dysfunction in knee cases is the lack of early use of the joint.

Arthritis of the knee joint is always to be considered when any pathology arises in that joint. It is an interesting fact in the study of knee pathology that arthritis develops more frequently in that joint than in any other joint in the body. Pemberton<sup>1</sup> made the observation that "In a series of 1021 cases of arthritis—all varieties—665 or a total of 65% were in the knee joint."

Syphilitic chondro-arthritis must also be taken into consideration in the diagnosis of knee conditions; although it has not been recognized as a gummatous inflammation, it is undoubtedly a tertiary process in the bone structure underneath the cartilage. Charcot's joints must be mentioned in connection with syphilitic conditions of the joints, but the differential points do not need be covered.

Another condition which must also be thought of in connection with joint pathology of the knee is intermittent hydarthrosis of the knee which occurs at various times, rather periodically and mysteriously, seemingly without cause. It has been thought to be syphilitic in origin by some observers; by others it has been attributed to focal infections in distant parts of the body; the thyroid has been blamed for the condition as also have the various vasomotor upsets. It is painless, appears suddenly, and subsides in a few days. It leaves no bad effects. The joint fluid is serous and contains flakes of fibrin. The synovial membrane may become bullous and thickened after repeated attacks. Quinine and arsenic seem to give the best results of any medication.

<sup>1</sup>Pemberton. Arthritis and Rheumatoid Conditions; Their Nature and Treatment. Second Edition. Page 46. 1935.

W. R. DAVIDSON, M.D. (Evansville): I notice that Dr. Mumford urges immobilization treatment. My attention was drawn to this type of treatment five years ago when a patient, a railroad baggage man, came in who had been in immobilization for four days with the leg at ninety degrees. It was a case of impacted semilunar cartilage. After operation, I had him in a posterior shell for five or six days and then he received an urgent call to go out because of some business connected with his baggage run. He went out of the hospital on the twelfth day without any trouble at that time or since. Later I began to abandon complete immobilization and in the last year I have not used it at all, since my son, Dr. Donald Davidson, has come home. We have used the Ace bandage and have always, where we had the opportunity, during two or three days of preparation, of instructing the patient in exercising the injured part because atrophy of the quadriceps is the main thing to avoid. We begin quadriceps setting exercises the day after operation and about the third day have active knee bending, and it is surprising how little pain there is present.

Dr. Mumford failed to emphasize one thing, and that is the tourniquet. He said he left it on until the capsule was closed. That is very important, because if the capsule is closed in two layers and the subcutaneous tissues and skin are closed separately, there is not apt to be any bleeding into the joint with resultant adhesions.

We have used no complete immobilization, no shell or full cast, but have lately been using the technic described by Moorhead; we have the patient out of bed on the fifth or sixth day, walking, with the knee protected by the Ace bandage, but all that time he used the quadriceps muscles during the day and I believe that is the most important part in after care.

We had one patient, a sixteen year old boy, who had been in a cast thirteen months and who had marked atrophy of the muscles, and a flexion of fifteen degrees. That cartilage was removed and on the twelfth day the boy was put in a Y.M.C.A. swimming pool for exercise. This course was so satisfactory that we have followed it ever since.

Attention to little things makes for success in this one condition which is so infrequently recognized. A copious cotton dressing is bound about the knee with an Ace bandage, using the six-inch width. This additional pressure causes constant constriction of the bandage and prevents hemorrhage. I have not seen one case in the last year where we have had swelling of the joint or have had to aspirate. Our own incision in operating is that of the Massachusetts General Hospital, a right angle one modified after Jones with a little extension upward, giving a free exposure, but in the last few cases we have used the parapatellar incision as described by Dr. Mumford.

I think this paper is one which should be given a good deal of attention by members of this association because of the fact that so many cases have been unrecognized and have been allowed to recur until

the joint has reached a marked degree of pathology which is far more serious than it should have been.

E. B. MUMFORD, M.D., Indianapolis (closing): In regard to Dr. Davidson's remarks, I believe it is recognized that any wound needs a certain amount of time for healing, and rest promotes healing. I do not think we should leave the impression that it is good surgery to do this operation and then not immobilize the knee for any time at all. I know there are a good many men who are doing that, but I do not believe anything is gained by it, and if the patient is given three or four days of rest there is a better chance of good healing.

#### ACUTE OTITIS MEDIA\*

J. V. CASSADY, M.D.  
SOUTH BEND

Last spring, in Washington, Professor Georges Portmann of the University of Bordeaux, showed such beautiful slides of the pathology of acute otitis media that I decided to bring these slides to you if at all possible. Professor Portmann had returned to France, but sent me his book, "Otitis Media," and gave me his permission to use this material. I had part of the book translated, and the material used in this paper is my interpretation of his work.

Otitis media is an inflammation of the middle ear which may be acute or chronic. Acute otitis media may occur with or without perforation of the tympanic membrane. The literature is replete with statistical studies often misleading; many milder cases, probably more than are seen, never reach a physician, especially if unperforated. In this paper the pathology of otitis media will be considered and the clinical course touched upon as it applies to the pathology.

The often-used classification of dividing acute otitis media into catarrhal and purulent is not permissible, the former not being a true inflammation but a mechanical exudate of fluid created by a vacuum of the middle ear from closure of the eustachian tube.

Professor Portmann classifies the disease into a simple and necrotic type. Simple acute otitis is an inflammation of the middle ear mucosa without destruction of its epithelium; the perforation, if it occurs, is caused by pressure of the exudate on the tympanum. The necrotic type is a crushing inflammation of the mucosa with destruction of its epithelium always leaving sequelae. If perforation occurs, it is large, and the result of necrosis of the tympanic membrane. The differentiation of the two types, simple and necrotic, gives a very comprehensive understanding of the disease process, explains its clinical course and the sequelae.

The etiology of any otitis media is dependent upon the invasion of the middle ear through the eustachian tube, the external canal, the lymph or blood

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stream. The infectious diseases, colds, eustachian tube obstruction, adenoid tissue, nasal obstruction, sinus infection, or traumatic injury to the drum are the usual etiologic factors. The bacteria vary. The severity and duration of the disease depends upon the virulence of the infection, the resistance of the individual, and the local tissue reaction. For example, the severest cases are often found associated with scarlet fever, yet one also finds the very mildest cases occurring in the same disease.

Simple acute otitis media is characterized by pain, deafness of transmission, an excretive inflammation of the mucosa, a small punctiform perforation, and a tendency to heal but a susceptibility to mastoid and intracranial complications. The pathology is that of vasomotor congestion, tumor-like swelling of the submucosa, inflammation, serous or purulent excretion, and thick, purulent or sero-purulent exudate. The tympanic membrane is involved by the pressure of the exudate. As the inflammation evolves, there is injection of the handle of the malleus, radiating to a diffuse redness of Shrapnell's membrane and extending down over the entire drum. The subepithelial layer is thickened by lymphocytic infiltration. The cutaneous lining is soaked soft by the excretion and is undergoing a superficial desquamation of its epidermal cells.

If a perforation exists, it is often very small, punctiform or fissure-like, and is recognized only by the excretion coming through it. It is usually located at the apex of the bulged out portion of the drum, in the posterior superior, inferior, or intermediate part of the drum. It tends toward an early closure as soon as the pressure of the exudate fails to keep it open.

Two-thirds of these cases of simple otitis heal without perforation. One-third result in perforation. The pathologic picture is the same in either case, but we distinguish, then, two types of otitis media:

- (1) Unperforated
- (2) With perforation

The unperforated form is most frequent in adults and in children with adenoid hypertrophy. The more severe cases result in perforation, the milder ones do not. In the more severe cases, the mucosa thickens to such an extent, with tumefaction of the eustachian tube, that the ability of the mucosa to absorb the excretion is insufficient, and a rupture of the tympanum must occur.

The antral mucosa, continuous with that of the middle ear, takes part in the same inflammatory process. The lymphocytes invade the Haversian canals and medullary cells. The periosteum is infiltrated with lymphocytes. The inflammation extends even to the bone. The deepest pneumatic cells, the eustachian tube, and dura react by a collateral edema. The lumen of the inflamed mastoid cells is swollen and closed, the mucosa, unable to absorb the excretion, may result in an exteriorization of its pus with serious consequence.

## EVOLUTION

As distinguished from necrotic otitis, simple otitis has the tendency to completely resolve. If there are no mastoid or intracranial complications, evolution takes place quite rapidly, with lessening of the pain, normal temperature, and a good general condition. The determining causes suppressed, the inflammation subsides, the mucosal swelling disappears, the tympanic mucosa becomes thinner, the exudate ceases, the perforation closes, and the remaining exudate is absorbed. The diffusely red tympanum becomes grayish, the short process and handle of the malleus become visible. The blood vessel injection disappears, and the pearly white color and light reflex return. There is a complete restoration of function and a normal histologic appearance. A transition into a chronic otitis is not seen in these cases. The formation of adhesions, ankyloses of the ossicles, or a so-called chronic adhesive process is a myth and does not occur. The epithelium being intact during the course of the inflammation, not being destroyed, heals without scar tissue formation. There is a normal functional and anatomic restitution.

## DIAGNOSIS

The diagnosis of a simple, acute otitis depends upon its differentiation from a tubal obstruction, a chronic otitis, and an acute necrotic otitis. The presence of spontaneous pain, the signs of inflammation, vascularization of the drum and the failure of the hearing to improve by air inflation are the signs which differentiate it from a tubal obstruction. The size and character of the perforation differentiate it from a necrotic or chronic otitis. In simple otitis, the perforation is small, punctiform, or slit-like, recognizable only by the excretion which comes through it, and tends to an early closure.

The duration of a simple acute otitis, perforated or unperforated, varies between a day and six months. The cure is often slow in spite of the great tendency to rapid restoration.

The prognosis, if there are no complications, is excellent from a vital and auditory functional standpoint. There is no transition from a simple acute otitis to a chronic otitis. Complications may develop, however, and require careful observation by a physician to diagnose. In 100 cases of simple otitis media, 3 develop complications. In 15 cases with complications there is 1 death, or 1 death in 500 cases, 0.2%. These are hospital statistics from the Bordeaux Clinic, and are probably much higher than normal, as many cases are unseen by a physician, especially if unperforated. The danger of death is probably much less.

Mastoiditis is due to a retention of pus in the pneumatic cells and an exteriorization of this inflammatory process. In other cases the infection may traverse the middle ear without leaving traces, lodging itself in the endocranum. Naturally, it is difficult to know if these complications are truly otogenous and often the immediate care of a physician is too late.

### NECROTIC OTITIS

Acute otitis media most often heals without sequelae, but we frequently see otitis media persist with a chronic large perforation showing no tendency to heal. This is due to a different pathological process known as necrotic otitis media. Necrotic otitis media is a destructive inflammation of the middle ear which surpasses the feeble inflammatory reaction of the mucosa. The cure of this destructive lesion is by scarring and a tendency to permanent auditory trouble.

#### ETIOLOGY

Necrotic otitis is often secondary in nature, for example, to influenza, to an eruptive fever, particularly scarlet fever or measles, or more rarely to diphtheria. The real cause is unknown. We frequently see the two types of otitis, simple and necrotic, in two affected ears of the same individual.

#### PATHOLOGY

The inflammation of the mucosa is quite accentuated, necrosis is rapid, starting with a marked hyperemia, the vessels are congested, often injured or thrombosed. There is a destruction of the mucosa, submucosa and periosteum, and the denuded bone is everywhere covered by pus and necrotic masses like a pseudo-diphtheritic membrane. There is a crushing, extensive lesion of the mucosa with partial or complete destruction of the underlying tissues, often even the ossicles and labyrinthine wall. There may be serious lesions of the internal ear or of the mastoid. An interesting thing is that when it arrives at the dura mater, the necrotic process regularly stops.

Naturally in necrotic otitis one finds all the transition forms from the most serious cases to those which clinically are barely distinguishable from a simple, acute otitis. One of these transition forms is an influenzal otitis with hemorrhagic blisters, especially of the drum epithelium. The inflammation and lymphocytic infiltration is very marked. The deeper tissues are thickened six to eight times their normal size. Hemorrhages occur by diapedesis or rupture of the vessel wall. The cavity is filled with pure blood. The mucosa is destroyed in larger or smaller areas. The hemorrhages are seen on the tympanum as bullae and hemorrhagic vesicles. These are present in the mucosa, in the fibrous layer, and in the cutaneous lining.

Necrotic otitis may be divided into: (1) perforated; (2) unperforated. The unperforated form, although less common, results in sequelae such as calcium-like deposits on the drum, and chronic adhesive processes. The same pathology, less severe, is present, but the evidence always remains to show that a necrotic otitis has occurred. The perforated form is a much more definite clinical entity.

The perforation of the tympanic membrane is by necrosis rather than by pressure rupture. The perforations are often multiple, enlarging, and coalescing, and often reach the bony tympanic ring. These perforations are large and seem to increase in size from day to day during the height of the disease. The

perforation often persists to become a chronic otitis. The perforation may be central or marginal. The central perforation has a sharp, discrete edge at which the cutaneous epithelium is blocked by the mucosal epithelium. The marginal type has invasion by the cutaneous lining of the external canal through it to become a chronic cholesteatomatous otitis.

The evolution of a necrotic otitis is not so rapid as that of a simple otitis. The destruction of the mucosal epithelium requires healing by scar tissue formation. This is true whether the otitis is perforated or unperforated, and if perforated there is often a transition into a chronic otitis. Whether this chronic otitis is a dangerous type or not depends upon the location of the perforation, central or marginal. The perforation may heal, but if so, it is by scar tissue and it is more likely to do so if adhesions are formed to the labyrinthine wall and the eustachian tube area is closed off by the scar tissue. The tendency of the entire process is to heal by granulations or scar tissue. A complete cure without sequelae is almost impossible.

The prognosis depends upon the amount of destruction, the virulence of the infection, and the resistance of the individual and of the tissue. The loss of substance and the lesion of the epithelium determines its duration. It may be very long if there is extensive bone necrosis. Endocranial complications are exceptional, so the vital prognosis is not so severe as that of a simple otitis. The functional prognosis, as regards hearing, is not so good. Necrotic otitis is cured by scars. These may attack the tympanic membrane, the middle ear cavity, the oval or round windows, and the ossicles, and often a permanent deafness of transmission and perception results. In mild cases a return to normal hearing is possible. One per cent of the cases become chronic and the percentage increases as the treatment has been neglected. Necrotic otitis may become a simple, chronic, purulent otitis (central tympanic perforation) or a chronic purulent cholesteatomatous otitis (marginal perforation).

Acute otitis media, then, may be of two types, simple or necrotic, and may or may not have a perforation of the tympanum. The simple otitis more prone to complications heals with no sequelae; the necrotic otitis practically always leaves evidence to show that it has existed.

#### DISCUSSION

RUSSELL A. SAGE, M.D. (Indianapolis): Otitis media, whether it be catarrhal, acute, or chronic, is a subject of such extreme importance to every otologist that new conceptions of the pathological process and new classifications are of interest whether or not one agrees with them.

Professor Portmann is a Frenchman, and his work has been among a people whose average standards of living are unquestionably much below ours. Consequently, statistics from his clinic would show a variation from those in this country.

The middle ear is probably the most frequently involved of all the auditory apparatus, and its mu-

cous membrane lining is the first to suffer when inflammation or infection strikes. Since the mucous membrane is continuous with that of the eustachian tube anteriorly and the mastoid antrum and cells posteriorly, infection may travel in from the nose or naso-pharynx and by continuity be carried to the mastoid. A knowledge of the mucous membrane changes which transpire during infection is, therefore, of importance.

Mucous membrane inflammations in the ear and eustachian tubes are similar to those of other mucous membranes when they become inflamed. Hyperemia, swelling, and round-celled infiltration, followed by serous exudate, are the primary steps. Thus, in catarrhal otitis media, the middle ear mucous membrane shows a mechanical inflammatory reaction only shortly after swelling and closure of the eustachian tube, and while the serous fluid seen soon after in the middle ear may not at that time be infected, such a condition often follows, shortly afterward producing a true otitis. If infection does not occur, the naso-pharyngeal irritation subsides, the tube opens, and the fluid runs out or is absorbed, or the condition may pass into a more chronic form. However, if the infection is severe enough, the condition may pass into a true middle ear suppuration.

Thus it would seem that to place acute catarrhal otitis in the same classification with acute purulent otitis is, for practical purposes, very satisfactory. For teaching purposes it is almost essential to describe the catarrhal first as one of the steps which usually occur in the production of an acute purulent otitis.

In this country such a condition is known as acute otitis media without the classification of simple and necrotic otitis which the essayist names.

It is of interest to observe the large number of acute ears which occur at the same time with an acute maxillary sinusitis on the same side. I am keeping a list of the acute antrums and acute ears which I see, and have been impressed with the large number of left-sided infections in people who drive an automobile a great deal. Evidently excessive chilling on the side next to the window plays a major role here, and often the two conditions are seen together. It is certainly worth while to transilluminate the sinuses in every case of acute otitis.

The insidiousness with which the streptococcus mucosus or pneumococcus type three cause major complications without marked ear symptoms must be remembered. I have seen one case in which a five year old child developed a fatal meningitis without demonstrable objective ear symptoms excepting a slight, grevish thickening of the drum. The only complaint in this case was that, following a cold and slight earache, the child complained of one-sided headache for three months, and did not seem up to par. He suddenly developed a fever of 103, the next day he had a full blown meningitis, and he died twenty-four hours later. Operation revealed slight destruction around the antral area, the rest of the mastoid appearing normal.

(Continued on page 55)

## DIAGNOSIS AND TREATMENT OF TRAUMATIC LESIONS OF THE URINARY SYSTEM\*

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When a condition of traumatism exists in or affects the urinary tract, some consideration of the structures peculiar to that tract and their reactions to injury may be worth while.

The urinary tract in its entirety is a tubular one, from the very smallest tubules in the kidney parenchyma to the urethral meatus. The caliber is small, with the exception of the urinary bladder which may be considered simply as a dilated portion constructed as a matter of convenience to the host and to the kidneys so that the host may expel the fluid at opportune times and the kidneys may work constantly without the hindrance of back pressure. With the seminal vesicles compared to the bladder, the genital tract in man is similar to the urinary system in its tubular construction.

A second consideration is that in these tracts there are no anastomoses. While closure of large vessels in the circulatory system may give occasion for little or no concern because of the extensive collateral circulation, yet closure of any portion of the urinary system becomes a matter of immediate concern and demands removal or correction if the entire portion of the system above the point of obstruction is to be salvaged. In plain words, obstruction means destruction.

Thirdly, since trauma anywhere results in tumefaction, any injury to parts of or near the urinary tract must be considered as a possible source of obstruction by pressure, even though the continuity of the tract itself may not be severed. An exception is that of injury to the corpora cavernosa which, though adjacent, does not necessarily compress the urinary canal. These structures are rarely traumatized in industrial accidents, but when such an injury occurs it generally reaches alarming proportions. The loose areolar tissue can hold a surprising amount of fluid, and the organ, when first examined after an accident, may contain as much as a half pint of blood. Such a sight is one never to be forgotten, and one's first reaction might be that of hastening to use surgical methods to control further loss or extravasation of blood. This idea may well be abandoned because any attempt to ligate the bleeding points will be futile—they can not be found. Fortunately, the bleeding can be controlled by cold compresses and, when the active hemorrhage has stopped, resorption of the blood can be hastened by hot applications; thus, rarely is surgery indicated. Possibly hematomata of undue proportions should, with strictest asepsis, be evacuated. I have a suspicion that the body makes good use of the blood caught in such containers, and I am never in a hurry to remove it.

\*Presented before the fifty-third annual meeting of the Wabash Railway Surgical Society, St. Louis, Mo., October 21, 1935.

Another condition not related to injury, but one that has been occasionally alleged to result from injury, is that of fibrous plaques in the dorsum of the cavernosa. They may be at times more pronounced in one or the other body but for the most part lie on the dorsal surface and are definitely a part of the corpora and not of the skin or its attachments. When discovered by the physician, he should advise the patient that the presence of these plaques is in no way related to injury since their cause is unknown. He may advise the patient further that at present no form of treatment is satisfactory and, indeed, some nodules have been known to disappear spontaneously. The patient should be asked to consider the presence of the plaques as something to forget about, if possible, and merely allow his physician to check up on the condition which, in itself, is an interesting one.

#### INJURIES OF THE URETHRA

Quite different is the situation in dealing with injuries to the urethra. It is a portion of that tubular system whose passages must be unobstructed. Injuries to it, therefore, call for immediate attention and closest observation for a while to detect latent evidence of damage to function. To the anterior portion, the most common injury is that produced by falling astride some sharp edge or solid material which crushes the urethra against the symphysis, thereby causing a rupture of or near the bulbous portion. Such injuries are followed by a continual bleeding from the meatus and a complaint by the patient of difficult and painful urination, or, what is even more likely, an inability to void. When such a rupture is suspected, the urinary stream must be diverted immediately. Usually, but perhaps all too often, this diversion is accomplished by resorting to a retention catheter. A filiform or whip-catheter may be useful and necessary to find the torn ends of the mucosa, but the general scarcity of these instruments of precision together with the impossibility of passing an ordinary catheter, and with the predisposition of any catheter to infection,—may prove to be a blessing in disguise. Then, of necessity, the patient will be subjected to a suprapubic cystotomy. In fact, in the opinion of many conservative urologists, cystotomy is the operation of choice anyway. It insures immediate and complete diversion of the urine, thereby removing any doubt as to the possibility of continuous extravasation of urine at the point of injury. Later, when the general condition of the patient as shown by the clinical record and his obvious state of well being warrants a belief that the drainage may have been prolonged sufficiently to think of closing the suprapubic opening, the surgeon may pass a steel sound down through the bladder, into the urethra, cause the tip of the sound to meet that of another one passed into the urethra from the external meatus, and thereby assist the passage of the instrument into the bladder. When such an instrument has been forced up through the cystotomy opening, one can easily slip a snug-fitting catheter over the tip of the sound and withdraw it with the catheter to the correct position for anchoring. All tubing from the

bladder wound may then be removed, and small strips of adhesive placed across the opening seem to promote a more rapid closure, though this is not particularly important. The catheter attached by a soft rubber draining tube to a bottle at the bedside usually performs in a satisfactory manner. Also, when destruction of the tissues is not extensive, the catheter left in place will cause satisfactory restoration of the continuity of the urinary canal. Should plastic repair be imperative, it can be accomplished by reconstruction of the canal around the catheter. It must be remembered that ruptured urethrae require very careful after-treatment. This consists of urethral dilatations to prevent stricture formation and they can not safely be discontinued for at least a year.

#### INJURY AFFECTING TESTICLE

Probably more frequent than any other injury to the genito urinary system is one affecting the testicle. It is spoken of as an "orchitis" or "epididymo-orchitis," when such descriptive terms as "contusion," "laceration," or "hematoma" could be used to designate the injury exactly.

The history of alleged injury and inspection of the testicle, especially if it is early in the process of trouble, should make the diagnosis easy and allow for the beginning of proper treatment. Treatment should be in keeping with the general principles of care applying to the particular type of injury, namely, that a contusion should be dealt with as such, a laceration as a laceration, and so on. When, however, there is an actual epididymo-orchitis it must be considered in its true form, namely, as being infectious in origin and secondary to a focus of infection elsewhere. Most often the responsible focus of infection is in the adnexa of the posterior urethra and may be either a venereal or non-venereal one. This most common lesion is the one with which those I have just mentioned are confused. Let me urge that you make every effort not to confuse these conditions since they play a large part in industrial controversies. Insurance companies, industrial boards and physicians deal with them constantly. The patient nearly always alleges that a "strain" has been responsible for his disability. He will give a history of lifting something heavy, of jumping, or falling, but careful analyses of large series of cases by competent observers lend support to the belief that "strain" is seldom, if ever, a contributing factor. As we understand it, there is no physiological process involved in a "strain" which might cause infection to regurgitate from the ejaculatory duct, through the vas to the epididymis. There is no doubt that a pre-existing infection, with an epididymitis arising, can be and is aggravated by bodily exertion, but to specify one single act of industrial exertion as being the producing factor is quite outside the limits of probability. In fairness to the patient as well as to the employer, the surgeon should classify all cases of epididymo-orchitis as being liable to recur, and he should recommend measures to minimize the likelihood of future disability. Those measures consist in ridding the posterior urethral adnexa of infection.

The process may be somewhat prolonged but cure follows persistence in gently massaging the prostate and vesicles twice a week until there can be found in the secretions only three to ten pus cells per high power field. Six, eight, or twelve weeks may be taken as an average.

#### INGUINAL PAIN

It might be well to mention the common complaint of inguinal pain following any accident. Here again, in fairness to the patient and his employer, the pain should not be dismissed as insignificant but, indeed, should receive consideration as quite the opposite, indicating a possible or even probable prostatitis. An examination of the prostatic fluid frequently reveals a high pus cell count and gives a reliable cue to the cause of the inguinal pain. Prostatic massage, again, is the accepted treatment.

Should the patient be the victim of a crushing injury with fracture of the bony pelvis, injury to the membranous urethra or bladder should be suspected. Any difficulty or delay in voiding should be regarded with suspicion. Deep urethral injuries are usually accompanied by large perineal hematomata though the presence of hematomata is not necessarily an indication of urethral tear. Profound shock is common with rupture. To make a diagnosis, one should and may with comparative safety introduce a soft catheter and any irregularity in its passage will quickly suggest the trouble. If actual damage to the urethra is found or even suspected, that catheter which finally enters the bladder may well be anchored in place to serve as a drain or help further in establishing a diagnosis of bladder injury. As there is little danger of stricture in the posterior urethra, the catheter may be left in place for as long a time as is necessary. Should there arise any suspicion that the catheter is not satisfactorily diverting the urinary flow, a suprapubic cystotomy should be performed at once. This procedure possesses many advantages. Not only is the stream of urine safely diverted from the deep urethra but any periurethral or perivesical extravasation is afforded easy drainage while rupture of the bladder itself may be palpated. If found, the extent of damage can be ascertained and appropriate measures for repair can be instituted.

#### RUPTURE OF THE BLADDER

A rupture of the bladder is one of the few real emergency conditions met with in urology. The diagnosis should be made without delay, and failure to make it and to provide prompt treatment is fatal. Unfortunately, the diagnosis is not simple and can not be made without some risk. Cystoscopic examination may be considered though torn, bruised, and bleeding parts make it most unsatisfactory or impossible. Even the catheter which enters a ruptured bladder will recover an uncertain amount of urine; especially will this be true if the rent is an intraperitoneal one. The simple introduction of a definite amount of sterile fluid within the bladder to determine the quantity which can be recovered is also not without risk especially when dealing with an infected urine. The peritoneal cavity would fare better without any added infection. Nevertheless such

risks at times are necessary. If a careful history and the objective symptoms cause one to suspect that the bladder is ruptured, sixteen to twenty ounces of water—or enough to fill the ordinary bladder—may be injected carefully and the amount recovered can be checked. Unless there can be other explanations for it, any discrepancy in the amount injected when compared with that withdrawn, indicates rupture. When that diagnosis has been made, a suprapubic cystotomy with drainage should be done immediately. The drainage should be free in all cases whether the rupture be intra- or extra-peritoneal.

In caring for the tears in the bladder wall, I personally like to close them, though some careful observers believe that it is not at all necessary, and therefore do not do so. Any free blood found in the abdomen should be left there where it will be utilized by resorption. Should there arise then a question about the usefulness of a blood transfusion, I should recommend the transfusion along with other general measures to combat shock. Later when the patient has sufficiently recovered, a urethral catheter should be introduced to permit closure of the suprapubic wound. Here, again, it is sometimes necessary to pass two sounds into the urethra, one from each end, to establish the continuity of a torn urethra. Occasionally a perineal urethrotomy must be done in order to locate the catheter in a satisfactory channel or portion of the damaged urethra. The catheter, when finally fixed in place, should be left there until the bladder wound closes, when it may be removed and changed. Finally, if the traumatism of the urethra has been extensive, dilatations of the scar at the point of rupture should be kept up for a year.

The ureter, because of its mobility and placement in soft parts, is rarely the subject of industrial injuries and may be overlooked here.

#### INJURY TO KIDNEY

The kidney, however, is an organ which is so vascular and friable that one wonders why it is not ruptured more often than we know it to be. Thus at times the body may be subjected to unusual blows or direct force without resulting in a kidney injury while at other times insignificant incidents may cause a kidney rupture.

Any and all persons involved in an accident should have the urine examined for blood, and if any be found that can not be explained as coming from the lower urinary tract, a kidney injury should be considered. Most contusions and small tears will produce a hematuria but it will disappear, usually within three days.

All renal injuries produce a tense, painful loin with or without swelling. Should the injury be severe enough to result in urinary extravasation, it will produce a local irritation of the peritoneum with alarming signs of a generalized peritonitis causing one to suspect intraperitoneal damage which may not exist. This point is not to be forgotten as it may prevent unnecessary peritoneal exploration, and drainage of extravasated retroperitoneal fluid is best done through a loin incision and not through a peritoneal one.

Consequently, in dealing with suspected kidney injuries, palliative measures are to be commended. The patient must be under careful observation as to pulse rate, blood pressure, and signs of shock. Fortunately, a majority of patients will recover under expectant treatment. While waiting, a urogram (given intravenously) should establish the functional quality of the opposite kidney and possibly show the extent of damage to the injured one. It is well to utilize this diagnostic medium which now seems to be established as safe. However, as soon as there is an increase in pulse rate and a decrease in blood pressure, or signs of urosepsis, the kidney should be investigated surgically. General surgeons, being more familiar with the abdomen and its contents, may be prone to make the investigation through an abdominal route. The lumbar approach, however, is the most widely used and has many reasons to commend it: the incision lies directly over the kidney itself; the perinephrium may be opened, inspected, and drained; the kidney may be freed and inspected without soiling of the intraperitoneal cavity or its contents; and, as was mentioned previously, retroperitoneal drainage is best established in strictly retroperitoneal routes. This is true even if the external incision need be located anteriorly in the flank where the drainage should still be kept extra-peritoneal, and it easily may be done so.

In dealing with any bodily injury, we should not forget that we are really dealing with a shock-producing agent as a first consideration. Therefore, the first thought in treatment should be that of combating the shock. When particular organs or systems of the body suffer most, they call for individual attention and, in dealing with the urinary system, the cardinal principles lie in remembering that the urinary tract must be kept open if it is to function and the urinary flow must be kept in its proper channels. By careful attention to details we may determine early any deviation from the normal processes and we may institute proper measures for the preservation of the system.

419 Hume Mansur Bldg.

**Plan to attend the Secretaries' Conference in Indianapolis, February Second.**

**Complete program on page 36.**

## DIABETES IN PREGNANCY\*

H. F. BECKMAN, M.D.  
INDIANAPOLIS

Although diabetes has been recognized for centuries, its true etiology remains a mystery, and today a disorder of the sympathetic nervous system together with pluriglandular dysfunction, affecting sugar metabolism adversely, is thought to be causative.

The baneful effects of diabetes associated with pregnancy and labor are amenable to treatment to the same extent as other diseases, but our success will be proportionate only to knowledge we possess, and at present much remains to be learned concerning metabolism. While the effect upon the child of the disturbed metabolism as found in the diabetic mother is well known, curative efforts have not been as successful in saving the child as they have been in saving the mother. Glycosuria, the symptom which most frequently leads to the discovery of diabetes, is present in pregnancy in over eighty per cent of cases at some time, but the frequent occurrence of glycosuria during pregnancy must not be taken as an index to the gravity thereof, and the appearance of sugar in the urine of the pregnant woman imposes an immediate obligation upon the clinician to establish its significance and should be a matter of grave concern.

The mature female has a higher sugar tolerance than at the pre-pubertal age, and with pregnancy this tolerance is brought down to the pre-pubertal level. Recovery to adult tolerance is usually complete toward the end of lactation. Williams and Wills found blood sugar curves on glycosuric pregnant women to be elevated, but not diabetic, and the curves presented an exaggerated lag.

From the obstetric viewpoint, a practical classification of the combination of glycosuria with pregnancy would be one suggested by Curtis,<sup>1</sup> viz.:

- I. Apparently innocuous glycosuria:
  - 1. Alimentary glycosuria (temporary but not sustained hyperglycemia).
  - 2. Glycosuria of pregnancy (maintained hyperglycemia, disappearing early in puerperium).
  - 3. Renal glycosuria (low renal threshold without hyperglycemia).
  - 4. Lactosuria (present with engorged breasts, hence more correctly a puerperal concomitant of lactation).
- II. Potentially serious glycosuria:
  - 1. Glycosuria of pregnancy (showing failure of post-partum readjustment).
  - 2. True diabetes mellitus (showing low sugar tolerance, glycosuria with hyperglycemia).

The frequency of diabetes associated with pregnancy was discovered at the Coleman Hospital in 6 cases out of 6,492 pregnancies occurring prior to

\*Presented before the Section on Medicine of the Indiana State Medical Association at the annual session in Gary, October 9, 1935.

April 1934, and in 5 cases out of 1,351 pregnancies since that date to September 1935. Whether this observation reflects a greater frequency of pregnancy among diabetics or closer study of patients is an open question, but probably attests to the first surmise. At the Indianapolis City Hospital 8 cases of diabetes were discovered in 1,000 consecutive cases of pregnancy.

In the light of these figures the report of First<sup>2</sup> finding 1 case in 1,000 consecutive pregnancies and that of Hirst<sup>3</sup> finding one case in 5,000 pregnancies hardly seems to reflect the true frequency. The frequency of pregnancy among diabetic patients is given by Parsons, Randall and Wilder<sup>4</sup> as 11 instances in 285 diabetics, or slightly less than 4 per cent. Lecorche<sup>5</sup> found 7 pregnancies in 114 diabetics, or slightly more than 6 per cent. Above statistics refer to preinsulin days, while more recent statistics report 10 per cent in Joslin's<sup>6</sup> series, and 15 per cent in the London Hospital<sup>7</sup> series.

With the advent of insulin, the problem of diabetes with pregnancy presented new phases. While the dangers to the diabetic from coma have been minimized, the frequency of pregnancy among diabetics has multiplied, hence the dangers have been extended to a greater number of patients. It was found that diabetic girls mature late, and under the use of insulin they matured promptly. Joslin reports the appearance of menses in four girls within one to two months after using insulin, the duration of the diabetes having ranged from two months to six years. Another group of six girls experienced cessation or irregularity of menses soon after developing diabetes without the use of insulin. The absence of menses was supposed to be the result of non-ovulation (Parsons, Randall, and Wilder). The frequency of sterility among diabetic women and impotence among diabetic men, almost proverbial in the pre-insulin era, was explained upon the same theory of non-development of the germ, and correction of this condition under insulin medication is cited as proof of the theory. Fitz and Murphy reported conception after the use of insulin in a diabetic whose menses had been suppressed for two years. Insulin therapy has, therefore, created a new problem for the obstetrician in the management of a condition which formerly was considered rare and now is becoming more common. The uncertainty of the behavior of diabetes during pregnancy is shown by Kramer<sup>8</sup> who reports that of 110 cases, 52 showed improvement, 32 were worse, and 26 remained unchanged.

#### FETAL MORTALITY

Abortion in diabetes is frequent, its incidence being given by Skipper<sup>9</sup> as 32 per cent, Kramer,<sup>10</sup> 25 per cent, Joslin<sup>11</sup> 22 per cent in pre-insulin era, and 17 per cent in insulin era. Abortion in diabetics caused by polyhydramnios is given as 27 per cent in pre-insulin era and as reduced to 11 per cent by the use of modern treatment<sup>12</sup>; it also is caused by acidosis, and both of these are responding to treatment. Malformations in the child are very common. Habitual death of the child after viability and after birth was very frequent; it is still given as 53 per cent by Jos-

lin, and has not been changed greatly even under treatment. Hypoglycemia and faulty storage of glycogen are frequent causes of death of the child and should be amenable to treatment, if not overlooked. Still-birth occurred in 21 per cent of Kramer's<sup>13</sup> cases and an additional 5.8 per cent died within 3 days after delivery.

The duration of diabetes in the mother seems to be a factor in the success of her pregnancy, as 85 per cent living births were obtained in the first year of diabetes, as compared with 50 per cent where the disease was of longer duration.<sup>14</sup> Overgrowth of the child, which is due to the hyperglycemia, in which condition sugar is found in the liquor amnii (not present under normal conditions), adds to the difficulties of labor and infant mortality. Overgrowth of the child is cited as occurring in 36.7 per cent of cases, certainly sufficiently frequent to suggest the possibility of diabetes, active or latent, in all mothers who give birth to large children.<sup>17</sup> Overgrowth of the child, however, cannot be ascribed entirely to hyperglycemia, since overgrowth together with post-maturity and death of the fetus has been produced experimentally in rabbits by injection of prolactin into pregnant rabbits.

It has been observed that pregnant women did better in the later months of their pregnancy, and this is explained by the vicarious action of the pancreas of the child assisting the mother in assimilating glycogen. Carlson contributed to the above theory experimentally by removal of the pancreas in bitches, non-pregnant bitches dying in 7 to 12 hours, while in pregnant bitches, neither glycosuria nor hyperglycemia occurred. With labor came rise in blood sugar, and after delivery typical diabetes mellitus was present. This supplemental contribution of fetal insulin seems not to be constant, hence cannot be counted upon, since sudden crises in the mother are not uncommon, and result in the death of the fetus and hyperglycemia with possible coma in the mother.

A case is reported by Gray and Feemster in which a child of a diabetic mother died four days post-partum, and the pancreas was found to contain twenty-four times the normal amount of Island of Langerhans tissue. They pointed out the danger of hypoglycemia occurring in the child of a diabetic mother whose child may have developed hyperplasia of the Islands of Langerhans to compensate for her insulin deficiency. This condition has not been commonly found since Ambard reports a case in which the child died 22 hours after birth and its pancreas showed normal Islands, but there was fibrous and lymphocytic infiltration in the acini. Feldman reports a case in which the child died shortly after birth and the pancreas showed Islands normal in number, two to four times the normal size, and marked inter-acinar fibrosis with lymphocytic and plasma cell infiltration. Very few cases are reported where the child showed sugar in the urine at birth, but we must keep in mind that over fifty per cent of the babes of diabetic mothers die before or early after birth, and doubtless many of these would show diabetes.

Of the 150 cases reported by White<sup>15</sup> of children

of diabetic mothers only one developed diabetes and this appeared at five years of age.

The blood sugar of the mother, the infant, and the placenta does not bear a constant relation, nor is the blood sugar of new-born babes constant, ranging from 50 mg. to 190 mg. per 100 gm. of blood in a series of 15 cases observed at the Coleman Hospital. These, however, were not all determined immediately after birth, but within the first three days.

The course of labor is not usually influenced by diabetes; however, in the puerperium, the effect of labor, exhaustion, hypoglycemia with resultant acidosis and coma must be remembered and their development anticipated. It must likewise be borne in mind that susceptibility to infection is increased and that infections are poorly borne by diabetics. Vulvo-vaginitis from monilia is frequent in diabetes and may cause invasion of the uterus and blood stream by bacteria. Lactation, while not usually satisfactory, seems to exert a beneficial effect on the diabetic, this probably being accomplished by the conversion of glycogen into lactose by the breast, a parallel being observed in muscular activity assisting diabetics in the conversion of glucose. The rate of secretion or conversion is an unknown factor, and may create a hypoglycemic state. As lactation decreases, the requirement for insulin increases. In general, diabetics lactate poorly. This has been observed likewise in experimental animals.

The effect of the pregnancy on the diabetes must be considered more seriously. Pregnancy may develop a latent diabetes, and the transitory glycosuria of pregnancy may be the first warning of the disease, or it may cause diabetes to become worse, especially if the pregnancy is complicated by infections of respiratory or puerperal origin. After parturition, due to removal of the child, anesthesia, and relaxed vigilance in diet, coma is prone to occur. This is cited as 30 per cent by Offergeld.<sup>16</sup> Modern conception and treatment of diabetes should reduce this danger to almost nil; however, vigilance and straight thinking are essential to this achievement.

#### MATERNAL MORTALITY

Offergeld cited maternal mortality of 30 per cent in coma during the first few days after parturition, and an additional 20 per cent of tuberculosis within the next two and a half years. Hanson cites mortality of mothers at 17 per cent and babes at 43 per cent. Peckham, in more recent statistics, gives that of the mothers at 6 per cent and the babes at 12 per cent. Kramer cites statistics on 238 cases, giving maternal death rate as 8 during pregnancy and puerperium, 7 within one year, and 19 more up to three years, giving a total mortality of 14.2 per cent, and fetal mortality of 35 plus per cent with 59 unaccounted for.<sup>18</sup> Interesting in this regard are the statistics recently published by the White<sup>14</sup> who reports maternal mortality of 5 per cent both in pre-insulin and insulin eras, those in the pre-insulin era being diabetic deaths, and those of the insulin era being obstetric deaths. This is not so good for the obstetrician, but it is somewhat difficult to reconcile with the earlier statistics. These latter statistics are entirely too opti-

mistic as the results in general will not be so favorable, since these statistics were established in the hands of experts in diabetes.

#### MANAGEMENT OF DIABETES DURING PREGNANCY

After it has been determined that the sugar appearing in the urine is glucose, it should be learned at what blood sugar level the spill occurs and whether the spill will keep pace with the increase in the amount of sugar ingested, or whether this accumulates in the blood. In the latter event, the evidence is more in favor of the existence of diabetes. It must be kept in mind that acidosis will result if insufficient sugar is available and that simply making the urine sugar-free is not the objective.

To supply the patient's needs of 35-40 calories per kilo, it will be well to give a ratio of carbohydrates 175-200 gm., proteins 60 gm., and fats 60-80 gm., and if spill occurs to meet same with insulin U 10 for each 20 gm. of sugar spill.

The diet, and when necessary, insulin, should be adjusted to meet the physiologic needs of the pregnant woman, keeping in mind the requirement for the increased metabolic rate of the mother during the last trimester. This, together with the demands of the child, calls for increase of 50 to 100 gm. of carbohydrates daily.

During labor, starvation, exhaustion and dehydration should be guarded against by administration of 200-300 gm. C, preferably as orange juice or sugar in weak tea or coffee. The first 24 hours after delivery 100-200 gm. C., should be provided in the same manner or as glucose intravenously.

#### CONDUCT OF LABOR

Parturition must be compared with a surgical operation in its effect on the diabetic. The uterine activity alone lowers the sugar reserves of the maternal tissues. Add to this the lowered fluid and food intake, the blood loss, the anesthesia, and the flood of split proteins from the wound within the uterus, and the sudden imbalance is easily appreciated. With the severing of the cord, the maternal organism is abruptly relieved of supplying nourishment to the child, and is as suddenly deprived of any assistance it may have received from the fetal pancreas. The insulin requirement may therefore increase or decrease, and closest supervision alone will prevent disaster.

Cases of severe insulin shock after delivery have been reported by Umber and Rosenberg, Hansen, Peckham, and others (Davis), and must be kept in mind lest it be confused with surgical shock.

Analgesia and anesthesia present difficult problems to the obstetrician since prolonged use of the volatile anesthetics is detrimental to diabetes. The superiority of morphine over the barbiturates, which thus far have not been shown to be detrimental to diabetes for analgesic purposes, is somewhat compromised by its depressing effect upon the child. Addition of scopolamine seems the ideal combination during the first stage of labor. Intimate knowledge and experience with scopolamine, however, are essential.

Avertin, while not shown to affect diabetes ad-

versely, is of too short duration to be ideal in obstetrics. However, in proper dosage, as a supplement to ethylene when section is contemplated, it is a delight to operator and anesthetist alike. Infiltration anesthesia and spinal anesthesia have a place in this procedure; however, low resistance to infection and reduced healing tendency in the diabetic must receive due consideration. Nitrous oxide or ethylene with oxygen is doubtless the first choice for the second stage of labor, and when it is preceded with morphine and scopolamine in the first stage of labor, it seems to be the nearest approach to the ideal.

#### CONCLUSIONS

To summarize the management of pregnancy and diabetes:

The appearance of sugar in the urine during pregnancy must not be underestimated nor assumed to be of the innocuous form. It should be the rule to hold patients, who show glycosuria during pregnancy, under supervision until all doubt has been removed by repeated sugar tolerance tests three and six months after lactation has ceased.

The relationship of pregnancy to the pancreatic disturbance is notoriously inconstant. Supplemental contribution of fetal insulin cannot be depended upon, as it is capricious. Sudden crisis in the mother, e.g., acidosis, coma, hyperglycemia, and shock, are not uncommon, resulting in the death of the fetus and hyperglycemia in the mother.

Evaluate the severity of diabetes by blood sugar determination on the fasting blood and the blood sugar curve after weighed meals. The patient should perform urinalysis daily, preferably two hours after a meal. The sugar tolerance test should be applied and repeated whenever doubt exists concerning this phase of the disease, and it is most essential after parturition, in order to forestall the development of coma.

Diet remains the most thoroughly controlled unit of management of diabetes, and due to the greater tendency of ketosis in pregnancy, it would seem rational to give a higher carbohydrate and lower fat ratio than has been commonly used in the past in the treatment of diabetes.

In the use of insulin, it should be borne in mind that in the last trimester of pregnancy there is seemingly more of this agent available, hence less insulin should be given and the dosage carefully regulated.

The response of the patient to control of diabetes removes thought of termination of pregnancy by abortion or premature labor, but emaciation, toxemia, uncontrollable hyperglycemia, marked ketosis, and death of the fetus, become indications for action, and if far advanced, constitute a bad prognosis.

With a thorough knowledge of the possibilities of insulin, it would seem that the gravity of the milder cases of diabetes with pregnancy would be minimized, but the sudden variances of diabetes by infection, exhaustion, and emotional disturbances cannot be foreseen, nor must we disregard the tendency of diabetes to aggravate tuberculosis; hence grave danger is ever present, and where the familial background of diabetes is known, the probability of con-

veying same to progeny would interdict pregnancy, and where such tendency exists in both parties, procreation or even marriage assumes a serious responsibility for both parties.

Eugenically speaking, known diabetics should not have progeny, since probably one in four will have diabetes, and the others will be potential carriers of tendency toward the disease. It has been estimated that our population is already one per cent tainted with diabetes, and the disease is a handicap to an individual and a menace to the race.

Long labor produces hyperglycemia; hemorrhage, vomiting, starvation, anesthesia, infection and even parturition itself create ketosis. Primiparity and multiparity, therefore, affect the problem, the child assuming greater importance in the former; hence birth by section becomes more frequently advisable, other conditions being equal.

Sterilization must be considered and becomes the problem of the parents. Every woman at all interested in a family should have at least two children, but where this is accompanied by a disproportionate risk to her health, she should be so informed. Better a childless mother than a motherless diabetic child. Frankness, citation of facts, unbiased advice, and action become the duty of the obstetrician.

Since wisdom in medical practice comes with experience, it is obvious that it would be as inconsistent for the obstetrician, unless well schooled in dietetics and insulin therapy, to direct the medical care of such patients, as it would be for the internist to decide how to carry out the details of delivery; therefore the assistance of one skilled in diabetes is almost imperative to obtain best results.

#### DISCUSSION

B. M. EDLAVITCH, M.D. (Fort Wayne): I would like to insert a supplementary phrase to one of the statements of the essayist. He makes the statement that "Every woman who is at all interested in a family should have at least two children." I should like to amend this statement to read: "Every woman at all interested in a family, and who can get a husband, should have at least two children."

Discussion of any aspect of diabetes mellitus is very much in order in this group. I suggest that so long as the active, general interest in this disease continues as at present, some phase of it be presented in this Section at each annual meeting.

Diabetes in pregnancy is essentially the problem of diabetes in the two decades between twenty and forty. It is a problem not only of the relatively young, but of the young diabetic whose carbohydrate tolerance and insulin requirement may be more or less profoundly affected by her experience of what Winchell calls "blessed eventing."

The two important points to stress, as so ably presented by Dr. Beckman, are: (1) one must be sure that the condition really is diabetes mellitus; and (2) one must really know how to manage and control the diabetes properly. Sugar in the urine *per se* does not mean diabetes mellitus. This basic concept should be generally known and appreciated, but it is not. In pregnancy, especially, as Dr. Beckman

has pointed out, sugar in the urine must be correctly interpreted. Lactosuria may occur; renal diabetes may occur. The sugar found must be identified as dextrose, or glucose, and hyperglycemia must be found. With no less than these criteria can a positive diagnosis of diabetes mellitus be tenable.

Management of the diabetic condition in pregnancy involves merely control of the diabetes in a relatively young woman whose metabolism may be affected at any time during gestation. The basic idea is to supply adequate and proper nourishment. Since the patient is young, she will need insulin. How to plan the diet best suited for her, and what dose of insulin she may need, are the important questions the attendant must solve. If he is fortified with sufficient knowledge and experience in this respect he will have very little if any difficulty. Personally, I know of no disease which is more satisfactorily handled than diabetes mellitus, provided the patient cooperates as he or she should, and in very few other diseases does one get such concrete evidence of the efficiency of present-day medical treatment.

**Roscoe H. BEESON, M.D. (Muncie):** After hearing this excellent paper on pregnancy complicated with diabetes, I am inclined to say that there are two admirable traits about this combination. One is the extreme rarity, and the other is the fact that the child is not born a diabetic. Dr. Priscilla White of Boston states that diabetes is more of a menace to pregnancy than pregnancy is a menace to diabetes.

There are three difficulties of diabetes and pregnancy. First, it is difficult for a diabetic to become pregnant; second, it is difficult for her to stay in this condition; and, third, her difficulties are usually increased for having been pregnant. Glycosuria is such a common condition that we often regard it as more or less physiological during pregnancy; at least one out of every seven women show glycosuria at some time or other. We say that if we find sugar, it does not mean much, but it may mean very much, because diabetes may start during pregnancy. There is only one true way in which to ascertain the presence of diabetes beyond all question of a doubt. This is by glucose tolerance tests. The blood sugar of a pregnant woman does not behave as does the blood sugar of a non-pregnant individual, but it is still a study of the blood sugars upon which we rely.

In regard to treatment, remember there is no individual in the world that requires better medical attention than a diabetic child or the pregnant patient. These patients should have daily urinalysis and should have blood sugar studies at least once a week. They should be on a high carbohydrate diet. At the time the woman goes into labor, she should be treated from a diabetic standpoint as though she were undergoing a major surgical operation. She should be given glucose-covered insulin. Anything which will shorten the period of her exertions is indicated be it an episiotomy or any other similar procedure. This has a tendency to cut down the acidosis. This is, of course, an advantage both to

the mother and to the child. It seems to me to be good practice to give glucose to the mother soon after the birth of the child.

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#### ABSTRACTS

##### TREATMENT OF ACUTE ALCOHOLISM, WITH TEN PER CENT CARBON DIOXIDE AND NINETY PER CENT OXYGEN INHALATION

Leon J. Robinson and Sidney Selesnick, Boston (Journal A. M. A., Nov. 30, 1935), state that acute alcoholic coma with dangerous respiratory depression, paralysis and cyanosis is a medical emergency. Death may be definitely prevented and recovery accelerated by inhalation of a mixture of 10 per cent carbon dioxide and 90 per cent oxygen for a length of time sufficient to reestablish and maintain normal respiration and color even after the inhalation is suspended. A minimum of half an hour should be observed. If necessary, the inhalation may be carried out longer. An accelerated decrease in venous blood alcohol levels is produced by carbon dioxide-oxygen inhalation over a period of thirty or more minutes, indicating an accelerated decrease in total body alcohol. No significant blood sugar observations were recorded either before or after carbon dioxide-oxygen therapy. In alcoholic intoxication there was a tendency to lowered blood carbon dioxide capacity. No appreciable change and no carbon dioxide retention was produced by carbon dioxide-oxygen therapy. The blood lactic acid content was elevated in alcoholism but was unaffected by carbon dioxide-oxygen therapy. The purpose of the carbon dioxide-oxygen therapy is not to arouse completely a comatose alcoholic patient but to reduce him from a state of dangerous paralytic alcoholism to the less deep stage of anesthesia from which he can safely be expected to recover. The therapy is recommended as an emergency treatment and is not indicated in the general run of moderately intoxicated patients so frequently encountered.

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JANUARY, 1936

**EDITORIALS**

**THE IMPORTANCE OF PROGNOSIS**

That mistakes in prognosis are more destructive to the welfare of medical practice than are mistakes in treatment was the contention of one of Indiana's best known internists at a recent meeting of medical men.

Fundamentally it would seem that all bases for prognosis and treatment must depend upon a careful and correct diagnosis. To the average lay mind, one doctor of medicine is thought of much as any other person with an M.D. after his name, and one often hears us spoken of as "the doctors." Unfortunately, the shortcomings of one member or group are likely to be visited upon the profession as a whole.

One is suspicious that sometimes no very good attempt has been made to make a correct diagnosis, and that a dishonest prognosis is made to coerce a patient into an operation or method of treatment which is not necessary. A patient may be told that he has a bad case of appendicitis, and unless an immediate operation is done, he will no doubt come to a disastrous end. A more careful diagnosis might have revealed a kidney stone, a pneumonia, a tabetic crisis, or even a simple attack of gas pains. A refused operation and a day's waiting may reveal to the patient, with the aid of another physician, a very different picture, and the physician who committed himself by a careless prognosis is shown up in a bad light. However, should the distress disappear entirely after a refused operation, and if in the meantime a "healer" has been called upon for advice, "the doctors" as a whole have acquired a "black eye" and the healer-group acquires a friend. On the other hand, if the surgery is performed and the pain and symptoms subsequently continue or recur with increased intensity, the patient is apt to lose his confidence in his physician and to resign himself to his

fate without benefit of medical attention; or he may put himself under the care of an irregular practitioner and continue to be a sick individual, embittered against the "regular doctor" in general. Often it is the old story of the "regular doctors had all given the patient up," when no really careful physician had had a chance to make a correct diagnosis or apply the correct treatment.

An unintelligent and careless prognosis of heart disease, of cough, of an attack of real or apparent unconsciousness may be given for a patient who outlives the physician who made it, and during the physician's lifetime that individual will be a constant eye-sore to the careless physician.

The prognosis of a visiting consultant may leave the impression with the family that the family physician has been negligent, and the result will be his unjust discharge with the way open for the employment of a less competent physician or quack.

A careless prognosis may cause a patient to lose his job. The head of a prosperous and even sound business may find his creditors becoming panicky and demanding payment at once of all obligations at an inopportune time, due to the unguarded opinion of a family physician or consultant regarding the prognosis of his disease. Even if the prognosis is correct, there are times when it were better tempered with good judgment or left unannounced.

A prognosis may turn a hopeful patient into a despondent neurasthenic or neurotic, an habitue of the patent medicine counter and a champion of all the fads and quacks that come along.

Before any prognosis is made, a correct diagnosis is essential. Prognosis must be associated with tact and cautious intelligence. Good treatment then follows as the night the day, or we may better hope, as the day follows the night.

**POLITICS IN 1936**

Once more the biennial jockeying for position in the legislative "hoss race" is on, and in a short time the woods will be filled with prospective legislators, all setting themselves out as being most duly qualified for the job of "saving Indiana." It has long been interesting to us to see folks whom we have known for years suddenly blossom out in new roles, having within themselves the ability to go to Indianapolis for a period of some sixty days, there to ponder sagely the great and burning problems before the Hoosier people, and to do this thing in a manner most satisfactory; yet, so far as our knowledge of some of these chaps is concerned, we had never suspected them of being even remotely capable of properly attending to such matters.

All candidates are not to be thus classified, but it does seem that most any Tom, Dick, or Harry with the slightest inducement (sometimes none), "comes out" for one of these jobs. In one of our larger counties, with a total of nine members in both Houses, there were in one party alone, two years ago, some forty candidates for these places. Prior to the great political upset of some few years ago, when

conditions were more nearly normal and when political forecasts could be made with a measurable degree of accuracy, such conditions did not exist; legislative candidates were not so numerous and it was then possible to make a rather definite analysis as to the qualifications of the various candidates. It was possible to weed out the wholly undesirables at the primaries, and this was usually accomplished. But with the sudden upset, all the work of local medical society legislative committees had to be done again. We had to rebuild the entire structure; many folks, heretofore unknown, were apparently in the lime-light and, in many cases, primary day arrived only to find us unprepared for an intelligent appraisal of what was before the voting populace.

We managed to make a pretty fair job of it for four years, but at the last primary, we were wholly at sea, even though we had long prided ourselves on having a cross-section slant at political conditions over a long period of years. All this with the result that our elected candidates, many of them of the "freshman" variety, arrived at the capitol without our knowing just where we stood. True it is that we had what we believed to be a fairly accurate conception as to what we might expect, but once the legislative whirl began, we were soon compelled to confess a high degree of dizziness. A bill came up in the House that we deemed most inimical to medical interests, one of its sponsors was a member of our delegation. This did not disconcert us to any great extent, as we had confidently expected this man to be "agin" us. However, a few days later, much to our chagrin and consternation, another member (a sophomore) and a man who under his own signature was a friend of medicine, arose to make a speech *in favor of the bill!* As though that were not enough for one session, a little while later the same bill was introduced in the Senate (it had been killed in the House) by *another member of our delegation!* And this was the very last of the fifty members of the Senate whom we would have pointed out as being the man to do such a thing.

The foregoing bit of political history is given that we may point out the urgent necessity of being on guard right now, long before primary day. Present indications are that the list of legislative candidates will be greater than ever before in Indiana's political history; the fact that a great majority of 1935 members were successful in landing political jobs is the one big reason for this, plus the fact that unemployment has given the political "bug" to hosts of our folks. Yet, never in our memory was there a better time to sound out these candidates on matters medical; with all the publicity attending socialized medicine, there can hardly be found a person who has not some notion or other on such truck. A little discreet conversation with these candidates will soon establish their position in such matters. We urge our local legislative committees to get busy at once; find out who is who and "make no bones" about telling the medical folks just what your findings are.

Beware of entanglements due to personal friendships; one of our personal friends most grievously

offended during the 1935 session; we would have sworn that this man would consult us before voting on legislation affecting the profession, yet he marched right off the reservation and never batted an eye! So, do not let personalities enter into the picture; pin your candidates down; get their sentiments in writing, and *file those written sentiments!*

There is no earthly reason why the three thousand members of the Indiana State Medical Association should not control this situation; we used to believe that it was wholly unprofessional to mix politics with the profession; now we find it very much of a necessity. Presidents of all county societies are urged to carefully scan their membership lists before making appointments to legislative committees; see to it that men are appointed who will give time and attention to it. And, having made the appointment, see to it that the committee is up and doing, not a week or two before the primary day, but *now!*

## MEDICAL PATENTS

That an economic crisis might interfere with the progress of medical research would seem to be a far-fetched possibility, yet there are reasons to believe that it is not only a possibility but a probability. Within the past few years there has developed a situation which may be more serious in its consequences to the development of medical research than is apparent now. Those universities whose chief support comes from state taxes may expect to find their demands for funds very carefully scrutinized and perhaps unheeded by tax boards and budget makers. It may become necessary to apply the available funds of state universities to the maintenance of physical equipment and the ordinary routine expenses which will make such heavy demands on the allotment of funds that projects in research will have to be abandoned. For the same reason that the tax burden will conceivably interfere with the generosity extended to universities which are state owned or controlled, so will that burden in the form of mounting income, inheritance and state taxes make demands on the generosity of those persons or corporations which were once philanthropically minded to the end that substantial gifts to research will become an impossibility.

To meet this need for funds which bids well to become acute, some leaders, in the interest of research, have taken the precaution of patenting their medical and bio-chemical discoveries. This allows them to maintain rigorous standards of manufacture which protects the public interest and also allows them to collect small profits which can be applied to finance more research.

It is this question of patents which has been bothering the idealists lately. They insist that the principle of patenting products of medical research is repulsive to those interested in pure science and that such patents smack of commercialism even though the only evidence of it lies in the collection of royalties that are known to be put to the use of further research. Apparently, such a standard of ethics pre-

vails in the ranks of one of our great universities. The trustees of the University of Pennsylvania gave up their department of cancer research rather than allow their medical discoveries to be patented and the profits applied to the pay of researchers and maintenance of the department. While there may be other reasons for the trustees to refuse the request of Mr. Irene du Pont, whatever they are, they seem to have cost the university the loss of material assistance in research as was given in the funds in Mr. Du Pont's Bio-chemical Foundation. While we might be inclined to believe that the trustees were a bit too idealistic in their demands, we probably have only a portion of the facts leading to their decision. Also, it might be a heartening sign to know that we have such leaders in the field of education who are willing to support their convictions with courage and determination.

Whether or not the decision of these gentlemen is the correct one, the facts leading to their conclusion should be made known to those entitled to them so that a rational program of standards in the form of patenting discoveries can be outlined. In the last analysis, the idealists should be concerned primarily with the public good. If the replacement of capital investment necessary to carry on medical research should be interfered with to any great extent, the public will be the loser.

If, because of the times, there is to be a loss of those funds which ordinarily go to medical research to the extent that progress in it actually will suffer, the purchasing public which is the benefactor in the advances already made should and will be willing to allow a small margin of profit to go back as capital investment for further research in medical science.

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### DOOR-STEP OPPORTUNITIES

Once a physician has completed the basic four-year course of his medical studies, plus a year or two of rotating internship and perhaps a residency or assistantship or even five years of actual practice, then and then only does he begin to realize that he has dedicated, knowingly or unconsciously, willingly or unwittingly, his entire life to study. The already proved science of medical practice is profound. No single human brain can encompass the whole of it. Uncountable avenues of investigative research still spread in a veritable maze before us. None can foretell the next fortuitous discovery or revelation. The conscientious physician feels the vacuum pressure of this intense urge to learn and eagerly responds to the best of his native ability. Others, too many perhaps, figuratively throw up their hands and surrender, defeated without a fight, and wallow in the seemingly comfortable yet definitely enervating slough of inaction until the descending clouds of mental mediocrity and the ever-darkening sheets of professional obscurity hide them from the eyes of their fellowmen. This is unwise, unsmart.

A benumbed or paralyzed brain cell is functionless; it responds not to external stimuli.

We marvel at and compliment ourselves upon our

medical organization, greatly improvable though it still remains. But it may be doubted whether there exists among any other profession in America so many opportunities for self-help and for postgraduate study and improvement. Late book publications are abundant. Scientific periodicals cover every minute field. Clinics usually are free and open to all who will take time to attend and observe. Short instructional courses are available. Those who wish to pursue longer periods of study, either through clinics or by lectures or even by personal coaching, scarcely ever need be denied. County, district, state, regional, and national meetings occur and recur at sufficiently frequent intervals and cover so wide-spread an area that there is, indeed, a selective choice within easy reach of practically every active practitioner.

These facts are not news to the alert physician, yet it may be questioned whether or not we are using with full profit the pay-dirt lying before our very thresholds.

It may be granted that every field of practice has its individual applications, and also that every individual doctor has his respective plans of approach. However, there are none which cannot be improved. To admit that premise would be to recognize such a thing as mental stagnation. This we ever should refute.

Too often do we think of postgraduate study in terms of a definitely proscribed course of lectures or clinics. These are very good, yes; their value is not decried in the least. However, just as muscle tissue atrophies from disuse, so with our brain cells or even with the digestive tract. We must not habituate our systems to predigested foods or seek only mental pabulum placed upon a silver platter and garnished with parsley and trimmings. Many, many worthwhile ideas are those dug up and evaluated by our own efforts.

No doubt we could learn much by some of the methods employed in the business world. There, many of the high-powered executives use what are known as "clip sheets" (usually prepared by their secretaries), which are daily assemblies of interesting and pertinent facts or happenings in the field in which the executive is concerned. Such a daily, weekly, or monthly clip-service easily could be inaugurated by any physician and his office assistant. An astonishing accumulation of information would result in a single year's time. The items readily could be filed for reference in inexpensive envelopes or in cheap snap folders, all properly labeled.

Should you not wish to mutilate your periodicals and papers, a card index system is not expensive. One thousand cards may be purchased for one dollar, and a serviceable, cardboard file costs only sixty-five cents. The cards may be used both for notes and for references to pertinent facts in the literature. Cross-indexing for ready access to any one point or particular feature is not difficult. Once you have developed an interest in some such system, you will be surprised how your knowledge in any one field of endeavor will grow, and you will grow with it, mentally.

Aside from the personal gain, you now have built up a gold mine of information upon which, after refining, you can rely for cerebral stimulation in clinical research and upon which you can draw for ideas in the preparation of theses to be presented before your scientific colleagues. All this makes you a still greater asset to your profession.

Now, when you attend state and national meetings, do you go for relaxation and rest, for social activities, or for educational advantages? All are there; all are needed; all are helpful. However, do not neglect your notes; plan to participate in discussions; endeavor to meet the essayists for informal questioning, and make an effort to contact men from all over the country, men in your own field. Thus will you broaden your knowledge. You learn of new therapy. You evaluate what you have heard and discover whether it has a rational application in your own practice.

Finally, try to build up a correspondence with workers in research, both clinical and laboratory. They appreciate the honor and usually will reply. Your reprint file and card-index notes will grow, and you will keep flaming warmly that vital spark of enthusiasm which is so essential to success in medical practice.

In thus reviewing a few, only a very, very few of our door-step opportunities in postgraduate study, let us Indiana physicians resolve, as we model and remodel the structure of medical practice, not to neglect the clay already in our hands. As has been true in the past, in all ages and at all periods of history, and in every field of endeavor, so will it be increasingly evident in the future that only the alert will receive the substantial rewards.

Despite all the tinsel and the camouflage, and despite all the by-ways and culs-de-sac of this extravaganza which we call modern civilization, the basic and fundamental principles of life and living remain unchanged.

Twas ever thus.

## POLITICS AND INDIGENT MEDICAL RELIEF

We are in receipt of a communication from the Vigo County Medical Society containing a rather lengthy resolution. In fact, there are nineteen whereases and one resolve in it, each whereas telling a little story of its own. It seems that along in 1931 this society, anticipating an increase in calls for treatment among the indigent population, which treatment had theretofore been accorded without charge, called a meeting to which the trustees of the two townships were invited. At this meeting, the expected increase was discussed and the society proposed to enter into a contract with the two trustees rather than have them continue the plan of contracting with an individual physician. The trustees refused to consider such an arrangement, stating that they expected local physicians to continue their work without pay. Matters went along until February, 1933, when the society made a little survey of the situation, establishing the fact that in one township involved there were some

eleven thousand indigent depending, for the most part, on the treatment afforded by this one physician. In the smaller township something like three thousand indigents were looked after by another physician. Again the two trustees were sought and were offered the services of the entire society at the same cost as under the plan then in effect. Their argument was that the proposed change would offer a much better medical service than the old plan. This suggestion met the same fate as the earlier one.

Then came the Governor's Commission on Unemployment Relief, and the local society again offered their proposed plan which, with minor changes, was agreed to by the state commission. However, the local chairman, the Vigo county auditor, refused to go along, and once again were the plans of the local society defeated, after which the Vigo County society decided to allow matters to drop, a logical thing to do. Then came a report of a survey of the City of Terre Haute, made by the Childrens' Bureau of the Department of Labor, which declared that there was a little matter of 43% deficiency in medical care in that city. Whereupon the Vigo county medics again came to the front and passed the lengthy resolution referred to above. Its concluding paragraphs follow:

"Whereas, Although the Vigo County Medical Society knows that adequate medical facilities exist in this county and have been offered to the officials on a reasonable basis, it feels that in some quarters its integrity may have been questioned; therefore, be it

"Resolved, That in justice to the medical profession and to the citizens of Vigo County, this resolution be spread upon the minutes of the Vigo County Medical Society and published in the public press."

Vigo County is but one of many counties that have had similar experiences in the matter of indigent medical relief; with a minor change or two, their problems might be multiplied several times, over the state; in fact, in practically all of our larger counties, similar situations have been common. And, like in Vigo county, most of us have long since decided that there is little that can be done about it. That one or two men can adequately take care of the medical problems of several thousand indigents is entirely out of the question; they cannot hope to do this thing, and the indigent population is the primary sufferer. Yes, we mean "primary" for there is a secondary effect that cannot go unnoticed.

Whenever there is a failure in medical care, who is blamed? In the present instance, is the blame attached to the medical attendant or to the officials responsible for them? Our answer is that the blame is laid at the door of neither of those two; it is directly charged to the medical profession. We have been observing this situation over a long period of years, long before the present depression did this thing rise to smite us, though not so actively as at the present time. Back in the days of the old fee systems, when certain physicians in our larger counties were drawing sums well over twenty thousand dollars in annual fees, the profession was accused of almost everything in the calendar, even though

only a half dozen or so were profiting from the system then in vogue. This medical poor relief problem is no new thing, since it antedates the present depression; it just seems to have some new ramifications, that is all.

The Vigo County Medical Society has nothing new to offer; it is old stuff to most of us. The answer, as is to be expected, is *politics*. The same thing existed in Indiana when the Republicans were in power; our Democratic friends seem to have forgotten the valuable promises made in the campaigns of the past few years, so the thing still exists, and will continue to exist as long as the present system is in vogue. It is even charged that under the present administration, conditions are worse than in former years, but that charge can not be substantiated; conditions are no worse, they are simply more noticeable, due to the fact that we have more indigents.

### EDITORIAL NOTES

#### DEARBORN-OHIO COUNTY REPORTS 100% PAID UP MEMBERSHIP FOR 1936.

High school debates on the socialization of medicine are coming thick and fast. Not only should every physician be interested to the extent that he is willing and anxious to assist inquiring students in getting material, but he should attend the debates whenever possible. The time will be well spent.

Under the Department of Societies and Institutions in this issue appears the reports of county medical society meetings, and new officers for 1936 are listed for all counties that have reported their elections. If your report was sent in late, your officers may not be listed in this issue, but will appear in the February JOURNAL.

Dr. B. M. Taylor, secretary for the Jay County Medical Society, sends out notices for meetings that should bring in every member. In addition to information concerning the meeting, the postal card announcement usually carries a little wit and a little philosophy. A recent one carries the line, "If one's mind is not open, it is as useless as a closed parachute, and just about as fatal."

How many of us are fully acquainted with the details of the Social Security Act? Perhaps its present form is not nearly so important as all those additions to come. Let us not forget the halt made necessary by the various acts governing medical care of veterans regardless of non-service connections. It is the "little foxes that spoil the vineyard."

It is interesting to note the hue and cry for home rule, and at the same time see how often it is said by the same groups that "if our community benefactors would do so and so we could be getting certain amounts of Federal money in." As often quoted, it is no longer "My Country, 'Tis of Thee," but "My County 'Tis for Me."

Under the heading of "Medical Gleanings from a Trip to the Southwest Coast" appears the following in the Nebraska State Medical Journal for November: "The first impression the observant medical man gets in California is that there are more superannuated candidates for the cemetery than to be seen in any other section. Their presence depresses and haunts you! Go to California to live?—Go there to die!"

The class of 1906 of the Indiana Medical College has issued a small book containing brief biographies of all of its members. With a membership of 122, this was the largest class ever graduated by any Indiana medical school. The book contains information of much interest to the class members and their families. It was compiled by Dr. Walter F. Kelly of Indianapolis, for the past ten years secretary of the Class of 1906.

The wide and uncontrolled sale of the barbiturates continues and increases. We have talked to many pharmacists, and they are anxious for assistance in controlling the apparent habits of many people who frequently purchase large amounts of these drugs. Some states have passed laws governing the situation. Do the physicians in Indiana have any opinions on this matter? Should this be one of the few things to be allotted to Federal supervision?

The headquarters office has received information to the effect that a man is working in Indianapolis and probably in other Indiana cities, buying physicians' samples of drugs, and to those physicians who may be tempted to dispose of unwanted samples in this manner, permit us to remind you that the practice is very unethical and that those who offer to buy are participants in a "racket" which deserves your wholehearted condemnation.

The other day we came across an article by a physician who had discovered that *veratrum viride* is an efficacious drug in the treatment of eclampsia. Why, bless you, man! We were taught that very same thing 'way back when—to be exact, in the year 1900, and here we find it recommended as something new! Another bolster for our contention that therapy as taught today is not the therapy we had to absorb in our school days.

Please remember that 1936 dues are due, and that delinquency begins as of February first. It seems that each year we find some good reason for urging the prompt payment of this little item, but 1936 affords additional reasons for being unusually prompt in this duty. Your Association cannot afford to slow up on one single activity now in progress, and it takes money to carry them all into effect. Nothing cheers your official family more than to see dues come in early in the New Year.

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The American Foundation Studies in Government is sending inquiries to various medical men, asking for their individual opinions on matters of medical economics, the socialization of medicine, etc. The American Foundation is attempting a serious and impartial study of these questions and is asking for information from those men who actually are doing the work. Answer the inquiries when you receive them, but do not do so until you have acquainted yourself with all phases of the problems, and can answer intelligently.

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President Senenich assumes the helm this month, though for some time past he has been serving in the capacity of president, due to the death of Dr. Walter Leach. Dr. Senenich has had excellent training for the rather onerous duties now incumbent upon him, and we look forward to another year of big things for our Association under his leadership. He is not only a thinker, but a planner, and his plans always bear evidence of careful thought. Yes, we feel content with such a man guiding the destinies of what we confidently believe to be the peer of any of the state medical organizations.

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Recently the committee on legislative activities of the American Medical Association sent out a circular communication offering the warning that "it must be recognized that medical service will, during the coming winter, be surveyed from the most critical and in some instances unsympathetic viewpoint. Statistical and quasi-statistical information will be forthcoming. It would, therefore, seem wise that the respective state associations give attention to the status of medical service and the facilities and quality of medical care offered, in order that ill-judged conclusions may be successfully controverted."

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Harry S. Gradle, M.D., in an article published in *The Journal of the Iowa State Medical Society* for November, discusses injuries of the eye and states that chemical trauma of the eye due to tear gas is best managed by the McNally method, but this treatment must be instituted within a short time after the accident. His treatment consists in the use of four c.c. of sodium sulphite, dissolved in twenty-five c.c. of water, then intimately mixed with seventy-five c.c.

of C.P. glycerine. Thoroughly lavage the eye with this mixture, then instill as drops every half hour. Do not wash the eye with boric, saline, or any other solution. This treatment, of course, to be used where the fluid tear gas has struck the eye.

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In the death of E. Starr Judd, head of the surgical department of the Mayo Clinic, the medical profession loses one of its most beloved members. The medical history of Dr. Judd reads much like an Alger story of old; his gradual rise to the top of his profession came only by dint of deep study and close application, plus much hard work. He was known as the "doctor's surgeon" due to the fact that so many physicians over the country consulted him for personal work. He was possessed of a most pleasing personality, gave freely of his time and talents in addressing medical groups all over the world, and seemed to have years of service before him when he was stricken with pneumonia. Dr. Judd will be missed as few men are missed.

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Drs. Milo Fritz and E. K. Tanner, in the *New York State Journal of Medicine* for December first, discuss "The Novocaine Pack," a thing new to us. They use it in fresh wounds in which any considerable cleansing and suturing needs to be done. The technic is simple and consists of laying sterile gauze over the wound and pouring thereon a one per cent solution of novocaine, allowing this to remain for about eight minutes. They find that the anesthesia extends about one centimeter beyond the wound edges, and that with this preliminary treatment, it is possible to cleanse an open wound thoroughly and to take necessary stitches without causing pain to the patient. When bleeding is profuse enough to interfere with the action of the novocaine solution, a little adrenalin is added. The method seems to merit a trial.

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According to the *Journal of the Association of American Medical Colleges*, the number of American students enrolled in foreign medical schools has greatly decreased during the past year or so. During the first ten months of 1935, only 34 applications made by American students in the medical schools of Great Britain have been received for evaluation by this Association. In a similar period during 1930, 700 such applications were received. In Italy, however, there has been a marked increase during the past few years, which indicates that American born Italians have suddenly decided to study medicine in their native schools. A year or so ago, this Association made a detailed report in the matter, showing that hundreds of Americans, unable to meet local entrance requirements, hied themselves to Europe and apparently had little difficulty in entering various schools there.

There are several changes in this issue of THE JOURNAL which we hope will please you. For the past three years, the William B. Burford Printing Company of Indianapolis has been printing your JOURNAL. They did consistently high-grade work, and the cooperation that your Publication Committee received from Burford's was always helpful and willingly given. We were sorry indeed when it became necessary for Burford's to relinquish the printing contract for THE JOURNAL. However, this month marks the beginning of several new features—your magazine will be mailed flat, in an envelope, so that it will reach you in good condition; an enamel cover will protect it after it reaches you; slightly larger type will appeal to you. We are striving constantly to improve the JOURNAL and to make it a magazine that you will want to read thoroughly on the first of each month. It is your magazine, and we shall welcome your constructive criticisms or suggestions at all times.

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Our recent attendance at a very prominent and large sectional medical meeting impressed us with the fact that all meetings, even the first general session, started on time. All sections were started likewise, and all papers were held to their starting and stopping points. Self-praise in the form of discussion from discussers was held to the minimum. It was possible for members of the audience to move from one section to the other in order actually to get those things so beautifully outlined on the printed program. Our last state medical meeting showed much improvement in this respect, yet some delays were troublesome. Even in county medical societies, such delays can be ascribed only to bad habits. We attended another meeting recently where all discussions were confined to written questions passed up from the audience at any time during the reading of the paper, and the chairman acted as master of ceremonies in deciding the order of turning the questions over to the speaker. At no time were we bored.

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Many human ailments have been blamed upon the assuming of the upright position. An unusual one, if true, is that of stuttering, which is no uncommon problem with school children and even extends into adult life. At the University of Michigan a marked improvement or even complete cessation of arrhythmicity and lack of coordination was found by biolinguists if the stutterer spoke while walking on all fours. Hazle Genesse of the University states in *Science* that "As yet, no explanation of this phenomenon has been discovered. It is conceivably due to the reinforcement of reflexes. More specifically, stuttering as a spastic phenomenon may be caused by a temporary stimulus applied to an upper motor neuron. This might be due to a temporary dilatation of the capillaries of the precentral cortex. By the as-

sumption of the quadrupedal position, an alteration of blood pressure possibly ensues, which releases the blood that dilates the capillaries. Hence, the spasticity ceases and the patient carries on a more nearly normal conversation." If this view proves correct, then present theories and methods for correcting stuttering should be revised and greater effort should be made to place them upon a physiological basis.

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"Bill" Doeppers has gone on, and in his passing we have lost a friend to medicine, a man who devoted his entire attention to the furthering of his profession in his native state. Born and educated in Indianapolis, Dr. Doeppers served his internship in St. Vincent's. In 1926 he became superintendent of the Indianapolis City hospital, serving for more than five years. He also served a term as president of the Indiana Hospital Association. He accepted several appointments in his local medical society, and for several years was treasurer of the Indiana State Medical Association, resigning only because of his later association with Eli Lilly and Company. As Doctor Doeppers explained it, he felt that an Association officer should be one who is engaged in practice. To few men is given the charm of personality possessed by Bill Doeppers; as a "mixer," he had few equals; he became the life of any and all parties. His impersonations of Hoosier physicians will long be remembered, and his presence at our future annual meetings will be sorely missed. Bill has left one of those heritages that few men leave—the memories of a man who did things and went places, a man of more than ordinary ability, and a man whom we can ill afford to lose.

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Dr. William H. Kennedy, of Indianapolis, who has for many years served as chairman of the Executive Committee of the Indiana State Medical Association, has announced that he will not be available for the office again, as he plans to devote his time to his practice and to his duties as chairman of the Indiana committee of the American Society for the Control of Cancer. Last year Dr. Kennedy wanted to be relieved of his duties, but he was urged to accept the office for another year. As chairman of the Executive Committee which guides the business affairs of the Indiana State Medical Association and of THE JOURNAL, Dr. Kennedy has given his counsel and has seen the affairs of the Association weather the depression period and come out in better shape than ever in the history of the Association. He has earned his release from strenuous duties, and we know that column after-column of laudation would be inadequate to express the thanks and appreciation that rightfully belong to Dr. Kennedy for the myriad thankless albeit wisely helpful tasks he has performed in the interests of our Association.

There has recently appeared a series of articles in a metropolitan newspaper on the subject of syphilis. Striking in this respect is the fact that the subject matter, insofar as we were able to detect, seemed to be quite authentic and interestingly written. Even more astonishing is the fact that the newspaper has courageously used the word "syphilis." In our opinion, this is a sign of progress which is even more promising than the fact that the public learned something about the real nature of the disease. At present there are very few newspapers in the United States that will permit the words syphilis and gonorrhea to be used in their columns. Some newspapers will permit the words to be used in signed articles, but under no condition would permit them in the other columns of the paper. Veiled allusions to "social diseases," "chronic diseases," "blood infections," and the like, have the effect of giving the reader the general idea of the nature of diseases being described, but more often than not they carry the implication that these conditions are unfit for mention in respectable circles. They also frequently give impressions concerning the diseases which are quite misleading. It is reasonable to believe that we shall not be able to resist the encroachments of syphilis in any very effective manner until we have thrown aside the absurd reluctance to face facts and call things by their right names. Effort should be made by the profession to drag the "varmint" into the open.

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it doesn't take the trouble to attempt to understand our methods and policies but is constantly looking on the green field across the fence? We remember the time when all education had to be "made in Germany" and when a medical authority, in order to be an authority, had to be a graduate of a German university. Occasionally at the present time we see a hangover from those days. There are, no doubt, many things that we might learn from other lands, but we should understand our own problems before we attempt to apply the foreign-made remedies.

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Recently it was our rather heavy responsibility to discuss the matter of socialized medicine before a forum group. As we discussed the various dangers to be encountered, we spotted a certain individual in the audience who might be reasonably expected to rise to his feet. Our expectations were justified, and in due time he made it clear that we are at least a half century behind England in all matters having to do with the proper way of handling things. He criticized sharply our methods and held up for emulation the fact that in England someone might go to the 'phone, if they had a 'phone, and call the proper official who would send a doctor to the home where he would take care of the patient and be paid by the government. It was very evident that vast admiration was held for the highly modernized method described. The question was pertinently put, "Why can't we have an arrangement like that?" The answer was so easy that we were almost ashamed to take the applause. The fact of the matter is that we have had a system of this sort, with many improvements, for so long that we have nearly forgotten about it, while in England the system is so new that it is still a novelty. As a matter of fact, our Anglophilic friend was not aware that even the schools are only partly socialized in England, inasmuch as children above the sixth or eighth grade must be educated privately. Many cities in England have hardly any public utilities. Their institutions for treatment of the sick are less developed. What can we expect from the public in these matters when

Infantile paralysis puts fear into the hearts of everyone. Physicians as well as parents are eager to learn the results of attempts at immunization. During the recent scare in southern Indiana, the physicians were kept busy at the telephone trying to answer questions regarding the possibility of immunity. The association of such names as William H. Park and J. A. Kolmer with the experiments carried out last summer in North Carolina and Virginia made them all the more interesting. What did these experiments reveal? Is there any value in injecting dead virus? Does the injection of living attenuated virus prevent the disease and, most important, is it safe? The tests made in North Carolina were under the supervision of Dr. J. P. Leake, medical director of the U.S. Public Health Service. A dead virus vaccine prepared by Drs. William H. Park and Maurice Brodie of the New York City Health Department was given to 458 children by Drs. A. G. Gillian and R. H. Onstott. There were 994 children used as controls. All were about the same age and had equal chances to take the disease. No cases of poliomyelitis were reported in these 1,452 children. Nothing was proved one way or the other by this experiment. Dr. Gillian stated that it would be necessary to have 10,000 children vaccinated and 10,000 controls to show the value of vaccination of this kind against infantile paralysis. Further trials are contemplated. Drs. Park and Brodie have reported that they have found "anti-bodies" in the blood of children vaccinated by this method. Dr. John A. Kolmer of Philadelphia gave a vaccine made of living virus, attenuated by chemical and other means, to 10,000 children. Ten children later contracted the disease and five of them died. Dr. Kolmer believes that these children already had the disease before the vaccine was given. None of these ten received what he considered a full protective dose. All investigators, however, are not agreed as to the safety of giving a live, though weakened, virus and some use these results as confirmation of their beliefs that a live virus for immunity should be investigated further before being given to children. There is not as yet a sufficient understanding of the nature of the virus causing poliomyelitis. Any experiments toward this better understanding are desirable and commendable. It is hoped that soon definite and favorable results will be forthcoming which will make it possible to afford protection against this dread disease.

## SECRETARIES' ANNUAL CONFERENCE

**Tenth Floor Ballroom, Columbia Club, Monument Circle, Indianapolis, Indiana**

**SUNDAY, FEBRUARY 2, 1936**

1:00 p. m. Registration.

1:30 p. m. Call to order and opening remarks by A. M. Mitchell, M. D., Terre Haute, chairman.

1:40 p. m. Remarks by R. L. Senenich, M. D., South Bend, president, Indiana State Medical Association.

1:50 to 2:20 p. m. "The Washington Plan," ROSS GARRETT, Washington, D. C.

2:20 to 2:35 p. m. "Medical Ethics in Everyday Practice," O. O. Alexander, M. D., Terre Haute, chairman of the Council of the Indiana State Medical Association.

2:35 to 2:50 p. m. "Work of the Liaison Committee with the Township Trustees," F. S. Crockett, M. D., Lafayette.

2:50 to 3:00 p. m. "The Local Societies and High School Debates," L. T. Rawles, M. D., Fort Wayne, debate consultant of the Indiana State Medical Association.

3:00 to 3:30 p. m. "New Deal Exploitation of Medical Practice," FREDERIC E. ELLIOTT, M. D., Brooklyn, chairman of the Medical Economics Committee of the Medical Society of the State of New York.

3:30 to 3:40 p. m. Intermission.

3:40 to 4:10 p. m. "Indiana's Program in Maternal and Child Welfare under the Social Security Act," ALBERT McCOWN, M.D., Director, Maternal and Child Health Division, Children's Bureau, U.S. Department of Labor, Washington, D. C.



*Albert McCown, M.D.*

4:10 to 4:20 p. m. "Graduate Education Program," C. J. Clark, M. D., Indianapolis chairman, Committee on Graduate Education of the Indiana State Medical Association.



*Ross Garrett*

4:20 to 4:30 p. m. "Policies of the State Division of Public Health," V. K. Harvey, M. D., Indianapolis, director, State Division of Public Health.

4:30 to 4:40 p. m. "Your State Medical Journal," E. M. Shanklin, M. D., Hammond, editor of THE JOURNAL of the Indiana State Medical Association.

4:40 to 5:10 p. m. Question and answer period for county society secretaries.



*E. A. Meyerding, M.D.*

5:10 to 5:40 p. m. "The Relation of the Individual Physician to the County and the State Medical Societies," E. A. MEYERDING, M. D., St. Paul, Minnesota, secretary, Minnesota State Medical Association.

5:40 p. m. Election of chairman for 1936.

6:00 p. m. Dinner. Remarks by E. D. Clark, M. D., Indianapolis, president-elect, Indiana State Medical Association. (10 minutes.) "Today's Medical Economic Problems and the County Society," OLIN WEST, M. D., Chicago, secretary and general manager of the American Medical Association.

All members of the Indiana State Medical Association are invited to be present. Dinner will be free to the county medical society presidents and secretaries. For others the charge will be \$1.25 per plate.

**SECRETARIES - OFFICERS - MEMBERS - DON'T MISS THIS!**

## THE INDIANA HIGH SCHOOL DEBATERS' CONFERENCE

By  
FRANKLIN S. CROCKETT, M.D.  
LAFAYETTE

The Sixth Annual Conference of the Indiana High School Debaters was held at Purdue University, Lafayette, Indiana, on December sixth and seventh.

Some six years ago, the Department of Speech at Purdue conceived the idea that a conference of debate coaches would be very helpful in training debaters in our high schools and secondary colleges. The first conference proved so popular that in subsequent years the conference has grown in numbers and in importance until this year the registration and interest exceeded that of previous meetings. Professor P. E. Lull, Director of Forensics at Purdue University, had charge of the meeting this year and, in response to inquiries, made it possible for our State Association to make available such literature as we had concerning the subject to be debated.

### SELECTION OF DEBATE SUBJECT

The subject for debate by high schools and secondary colleges has been determined through majority choice of the coaches of all the debating teams. The subject which seems to attract the greatest amount of interest, then, is exactly worded and adopted as the topic for the year. Usually these subjects deal with matters of intense public interest at the moment, and for this reason, added enthusiasm is shown by the debaters in presenting their side. Each high school has an affirmative and a negative team, so that before the season is over, each school appears on both sides of the question, although the affirmative team in any one school always keeps to the affirmative side and the negative team does not change its position, either.

This year the problem to be debated has been expressed in many, many different variants, but the actual wording of the question for the debate is as follows:

"It is resolved that the several states should enact legislation providing for a system of complete medical service available to all citizens at public expense."

### THE CONFERENCE

Friday, December sixth, in the great hall of the Purdue Memorial Union Building, some seven hundred or eight hundred enthusiastic, youthful high school debaters registered for the conference. The schools represented were forty-seven in number. Of this number, sixteen have registered every year since the conference was organized, and the attendance was state wide. Schools from Evansville and New Albany in the south, and Gary, South Bend, and Fort Wayne in the north were represented by delegations. This will show the widespread interest and the type of audience before which we doctors are



*Morris Fishbein, M.D.*

going to appear as proponents of the present type of medical practice in opposition to those who would favor state medicine. The subject, as stated, excludes all other types, such as prepayment insurance, or other forms of practice, and declares purely and solely for legislation providing medical service at public expense.

The debate Friday afternoon between the teams from Indiana and Purdue Universities was decided for the affirmative by Professor A. Craig Baird, Director of Debate, University of Iowa. The award of the decision to the affirmative did not at all have anything to do with the merit of the question, but was adjudged on the many technical features which would naturally influence Professor Baird's decision when he came to give a critique and analysis of the debate. Probably most of us doctors present felt that his decision was just.

At the general session, ten o'clock Saturday morning, December seventh, "The Case for State Medicine" was presented by Dr. Charles Dudley Saul, Clinical Professor of Medicine, Hahnemann Medical College, Philadelphia, Pennsylvania, and "The Case Against State Medicine" by Dr. Morris Fishbein, Editor, *The Journal of the American Medical Association*, Chicago, Illinois. Dr. Saul's speech was recorded but is too long to print here, and Dr. Fishbein's machine-gun delivery made it impossible for any stenographer available to keep up with him. Suffice it to say, however, that the substance and material submitted by the two debaters was very interesting to those who listened; one prominent educator of Purdue University expressed himself as being impressed that Dr. Fishbein had so completely established his case with facts and figures that no one should have any difficulty in knowing what should be the proper solution of the question debated.

Following the conference, at twelve o'clock, some thirty physicians from Lafayette and other cities over the state, and several of the Purdue faculty interested in the subject, enjoyed a luncheon and were entertained by Dr. Fishbein, who, at some length, gave us a review of the national situation as it has been developing and what now seems to be in prospect for organized medicine from its socially minded "friends."

### RESULTS OF DEBATES

At first many of us felt that this particular subject for debate this year had been selected by the enemies of the medical profession in order to spread propaganda for socialized medical practice. After listening to several debate teams and a review of the best that

(Continued on page 56)

## PRESIDENT'S PAGE

### YOU AND YOUR MEDICAL ASSOCIATION IN 1936

Another year has been completed, one of that hundred years of which it has been said that, in this span, human life has been changed more radically in its social habits than in six thousand years of previous history.

The advances of medical science in this period have been no less remarkable and the profession has not remained unresponsive to accompanying social adjustments.

As there is no reason to believe that the rate, variety, or complexity of change will be diminished during the coming years, this New Year's Day marks only a point attained from which further progress will go on. If the medical profession is to maintain its relative position amid continuing change, it is evident that social interest on the part of the individual physician is needed, and good medical work, too. But these are not enough; a willingness to co-operate with other men in his medical society and an opportunity to serve are essential. The interest of an individual will many times depend upon what is required of him in organization activities. Leadership and strong medical societies are necessary.

If the practice of medicine is a job to be endured solely as a source of livelihood, and to be escaped from for some other interest or activity whenever an opportunity offers, or, if capitulation to unsound social plans or political dominance is invited, then medicine needs good men to restore it to its former high estate.

If, however, medicine is the major interest of a life to be lived, it offers the inspiration of fields yet unexplored which are so vast that the mind may encompass only a fraction, a history of magnificent leadership and the promise of spiritual, social, and material rewards in proportion to the capability of the individual. A modest position in the practice of medicine does not exclude these advantages. The decision is one for each individual medical man to make, and the aggregate of all answers will be recorded in the future of medicine.

The Indiana State Medical Association, by coordinating the activities of its component societies and acting together with other constituent state associations in the American Medical Association, provides the machinery through which medical men may keep abreast of changes, local and national, both scientific and social. In this way, also, may their united efforts be brought to bear to the good of both the patient and the physician.

#### ASSOCIATION COMMITTEES

Committees play an important part in the activities of the Association. The personnel of some committees are named by the Council, some by the Executive Committee, and some by the President.

A rearrangement of committees of the Association is being made, in accordance with the spirit of the revised By-laws. A few committees are reduced in size. On some, experienced service or familiarity with pending matters makes reappointment of certain members advisable. Personnel of committees, who have served for two or more years, are being in many instances changed for the purpose of giving more members an opportunity to become acquainted with and interested in the work of the Association. Too many or too large committees become unwieldy and ineffective in the administration of association affairs, but an effort will be made throughout the year to bring as many members as possible in close touch with association activities.

The affairs of the Association are in excellent condition, and it ranks among the best of the states as a result of years of wise guidance and unselfish efforts on the part of its officers and members. The membership of the State Association is at an all-time high. The age groups are almost equally divided between those above fifty years and those under fifty years—a balanced contribution of the energy and enthusiasm of younger members with the conservatism and experience of years.

Excellent medical programs, presenting cardio-vascular and neoplastic diseases, are being arranged for county societies which wish to avail themselves of the interchange of speakers, and the broadest participation is being encouraged. An outstanding conference for secretaries of county societies has been scheduled for February. The National Security Act, National Public Health Activities, questions of medical economics and medical organization will be presented by representatives of the National Government and leaders in medical organizations of other states. The State Association is arranging two great medical meetings. One, a post-graduate meeting of two days intensive study of cardio-vascular and neoplastic diseases, and the other the Annual Meeting with Sectional and General sessions. In these meetings, programs planned will be comparable to the best offered anywhere.

These are your meetings. This is your society. Its successes are your successes.

This responsibility rests with you: To your patients you are the sole accepted representative of the medical profession, and your interest and guidance, your strength or weakness, accrues to the benefit or injury of the whole group.

*R. L. Denoerick*

## DR. CRAMP RESIGNS FROM A.M.A. BUREAU

Dr. Arthur J. Cramp, founder and for twenty-nine years active head of the American Medical Association's Bureau of Investigation, has resigned. His resignation comes as the result of a recent illness.



*A. J. Cramp, M.D.*

It is with the deepest regret that we learn of Dr. Cramp's resignation. A most delightful half hour was spent with him a few days ago, and, as he expressed it, "It seems unreasonable that a man of sixty-three, with a record of but twenty-nine years in the service of the A.M.A., should have to retire." In Indiana we have a special interest in Dr. Cramp, for he has maintained a membership in the Porter County (Indiana) medical society for the past thirteen years.

Dr. Cramp was born in England, came to the United States when nineteen years of age, and graduated from the Wisconsin College of Physicians and Surgeons. In 1906 he became a member of the staff of The Journal of the American Medical Association, and soon developed what was first known as the Propaganda and Reform Department, now known as the Bureau of Investigation, and his accomplishments in that Bureau are a matter of open record. It is interesting to know that Dr. Cramp early recognized the importance of the work he was undertaking, and one of the first things he did was to safeguard his files. As he put it, "I knew that all material used in our investigations must be carefully and safely filed; I did not know at what moment we might be called upon to defend ourselves, and it was mighty important that our records be available. So I insisted that my quarters be so arranged that they could be carefully locked up."

In addition to the multifarious duties of his department, Dr. Cramp has found time to do a lot of writing. His "Nostrums and Quackery" is now in course of preparation for the third edition, and is one of his best literary efforts. Other books, numerous magazine articles, both lay and professional, and hundreds of speaking engagements have occupied the time of this extremely busy man.

Dr. Cramp does not share the idea that he is primarily an A.M.A. official, and that his time and talents were solely in the interests of that organization. He has felt that his primary interests were for the good of the public, and the benefits to the medical profession were secondary! This idea, expressed by Dr. Cramp, sounded a bit odd, but a little thought convinced us that he is entirely right about it; the Bureau of Investigation is for the protection of the public primarily. In the past fifteen or twenty years, every major quack or medicine man who has been exposed probably owes his downfall to Dr. Cramp.

Dr. Cramp has a pleasing and compelling personality. He addresses himself directly to the point at issue, and he commands the respect of his hearers. He has been fearless in his denunciation of fraudulent practice and, on occasion, has had to proceed against personal friends.

A personal acquaintance with Dr. Cramp over a long period of years has been a pleasure. In various official capacities, such as the Indiana State Board of Medical Registration and Examination and the local county medical society, there have been close contacts. Innumerable requests for information have been forthcoming with amazing celerity, and THE JOURNAL has made frequent use of information obtainable from no other source.

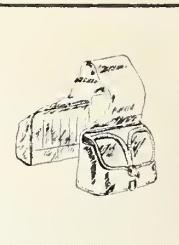
As might be expected, a department such as Dr. Cramp has developed comes in for criticism from various sources; it has been openly attacked by some of the proprietary medicine interests of the country. The non-medical charlatans and mountebanks, findings their paths obstructed, have moved heaven and earth in their attempts to forestall the activities of this man, and some of them have gone to such lengths as filing suits against the A.M.A. Cases filed have been innumerable, yet only two have come to trial, the now-famous Wine of Cardui suit, and the suit of Norman Baker of "cancer cure" fame. In the former case, a judgment in the sum of *one cent* was given the plaintiff, instead of the sum of \$300,000 which had been demanded! It is said that the one cent would not have been awarded except for the improper placing of a preposition in one of the articles attacking the company. In the case of Norman Baker, the suit was entirely unsuccessful.

Just what sort of a man is this Dr. Cramp who has made a record unequalled by few in this great profession of ours? He is rather tall, spare, gray-haired, wears a small Van Dyke, and he at once impresses his caller as being a man of firmness. His quiet, dignified manner of speech compels attention. Probably one's first impression is that here is a man full of his subject and morally certain of his conclusions on a matter. He has hobbies, just as any active, busy man must have, and they include hiking and photography, conclusively proving that he is a most kindly man in spite of the sternness of his accusations against those who cross swords with him; no other sort of man could enjoy his spare time in walks through the country, seeing Nature at her best, and pausing occasionally to photograph the more appealing vistas. Such a man is Dr. Arthur J. Cramp as we knew him at his work. That he will be missed is on every tongue at 535 North Dearborn Street; that he has built a monument for himself that will endure for coming generations in medicine is a certainty; that his successor will find it a task of many years to equal the man's record is the very reason that even now A.M.A. officials are combing the country for his successor.



## INDIANA MEDICINE IN RETROSPECT

L. G. ZERFAS, M.D.  
Historian, Indiana State Medical Association



LIVINGSTON DUNLAP  
INDIANAPOLIS, INDIANA

Dr. Livingston Dunlap, the third physician to settle in Indianapolis, came as a very young man from Cherry Valley, New York, in 1821. He made the journey on horseback, arriving at this place in destitute circumstances. However, he had had a good medical preparation, having attended lectures in one of the schools in his native state and having received good training from his preceptor, Dr. Joseph White, a celebrated surgeon, President of the Medical College at Fairfield, New York, and Professor of Surgery in the College of Physicians and Surgeons of the Western District of New York.

Dr. Dunlap made his home with Dr. Samuel Grant Mitchell, the first physician to settle in Indianapolis. In August, 1821, an epidemic of malaria broke out in the town and surrounding country, and Dr. Mitchell, his wife, and daughter, as well as Dr. Dunlap, were prostrated by it. The four members of the household were confined to their beds in a small log cabin. Matthias R. Nowland came to the rescue and carried Dr. Dunlap (in the manner of a papoose), to his own home, where he nursed him back to health. This act of kindness resulted in a life-long, fast friendship between the two.

In the Indianapolis Gazette, December 7, 1822, there appeared the announcement that "Doctors Mitchell and Dunlap continue the practice of medicine and surgery in partnership." Very possibly the partnership, the first in Indianapolis, was formed immediately upon Dr. Dunlap's arrival and was mutually beneficial because of Dunlap's surgical training and Mitchell's long practical experience. He remained the only surgeon in the place until 1830.

In July, 1823, Dr. Dunlap married Miss Georgiana M'Dougal, a member of an early pioneer family, several of whom became distinguished. His wife died May 20, 1834. In the latter part of his life he married Deantha Marietta Sterrett.

The partnership of Mitchell and Dunlap was apparently dissolved after a period of a few years, as there appeared a notice in the Indiana Journal, June 19, 1828, stating that "Drs. Dunlap and M'Dougal have formed a partnership in the practice of medicine and surgery." They maintained a drugstore, as frequent notices in the papers announced the arrival of fresh vaccine matter. Their store and offices were located opposite Washington Hall. In one announcement it was stated that their collection of drugs and medicines was as large as any in the state, and that

they were prepared to fill bills and orders on as comfortable terms as could be obtained in Cincinnati. They also carried an assortment of anatomical preparations, surgical instruments, etc. Their stock was supplied principally from Philadelphia. They had the first soda fountain in Indianapolis (1831), but in May, 1833, they sold the business to Caleb Scudder and William Hannaman.

Sulgrove says that in the spring of 1823 the Indiana Central Medical Society was formed in order to license physicians as directed by law. Dr. Livingston Dunlap was elected one of the three censors of the society and also its secretary, a position which he held continuously up to 1831. How long that society was in existence is not now known, nor how long Dr. Dunlap served in the capacity of secretary. Marion county was created by law December 31, 1821, and at the same time the county was included in the Fifth district for purposes of medical licensing. The State Medical Society granted this legal division. Later Marion county was included in the Seventh district, as it is at present.

Dr. Dunlap was secretary of the Indiana State Medical Society to as late as 1832, and possibly longer, though it is not definitely known just how long the State Medical Society was in existence. Very possibly there existed no Society after 1832-33, that being the period of the cholera epidemic, poor finances, etc.

He was a member of one of the early Masonic lodges in the city. In 1824, at a meeting of the Grand Lodge held at Madison, he was listed as Junior Deacon. He was secretary of Center Lodge for three consecutive terms, December 27, 1824, to June 24, 1826. In August, 1825, he was appointed adjutant-general of the militia of Indiana. He was on the committee composed of Arthur St. Clair, Seton W. Norris, James Morrison, Livingston Dunlap, Henry Brady and Alexander Wylie, to invite General Harrison to come to Indianapolis to celebrate the anniversary of the victory of the Battle of the Thames. Dr. Dunlap was one of the first trustees of the Market House built in 1832, overseer of the poor, physician of the county infirmary, one of the first trustees of the Marion County Library, and a member of the committee to determine whether Sophia Overall had smallpox or varioloid. In July, 1833, he was appointed a member of the first Board of Health in Indianapolis. This board was organized because of the cholera epidemic. Other committee appointments included those for Fourth of July celebrations, ceremonies occasioned by the safe arrival of a steam-

boat, the anniversary of Washington's hundredth birthday, etc. He was not infrequently a candidate for office. August 4, 1832, he was a candidate for trustee of the County Seminary, and for recorder, in July, 1834. In 1841 Transylvania University conferred upon him the honorary degree, Doctor of Medicine.



*Livingston Dunlap*

Dr. Dunlap served a term as city councilman from his ward in 1834 and urged the building of a municipal hospital for the indigent sick of Indianapolis. It is interesting to note, in a report of the Committee constituting the first Board of Health (July 20, 1833), that resolution number four provided for a suitable house for a hospital, and the appointment of a hospital physician. Most probably Dr. Dunlap was attempting to arouse the interest of the president and trustees of the town of Indianapolis in hospitalization of the indigent, particularly with reference to those afflicted in the epidemics of cholera and smallpox. How long Dr. Dunlap served as city councilman is not known, but he is listed as being a member in 1858, in which year appropriations for the building of the first City Hospital building in Indianapolis were approved, and construction started. It was completed in 1859. The trials and vicissitudes necessary for the erection of the hospital are deserving of separate mention, except to state that to Dr. Dunlap belongs the credit, more than to any other one man, for having persistently labored for its creation.

He served as postmaster from 1845 until 1849. He was appointed a member of the Board of Trustees of the Deaf and Dumb School in 1844 and served for several years following. He tendered an invita-

tion to the members of the State Medical Convention, who met in Indianapolis in 1849 to formulate plans for a permanent organization, to visit the Deaf and Dumb School. His invitation was accepted.

At this State Medical Convention, Dr. Dunlap was elected the first president of the State Medical Society, now the Indiana State Medical Association. He took an active part on various committees, being chairman of the Executive Committee at its tenth annual session in 1859. He was one of five members appointed at the convention to memorialize the legislature of the State upon the subject of homicidal insanity—asking the enactment of a law requiring that in all cases where the plea of insanity is set up as an excuse for crime, the question of insanity shall be first and separately tried and decided by the commission of lunacy. He was appointed at a meeting of the State Medical Society in 1850 to serve with five other members "on the use of anesthetic agents." At the session of 1851 the report was submitted, stating that "we have heard of no case in Indiana, where death has been connected with the exhibition of chloroform nor of any disagreeable consequences resulting from its use, other than of a few hours' continuance." Dr. W. H. Byford, of Evansville, favored its use in obstetrics. This report was made five years after the discovery of ether as an anesthetic agent and four years after the discovery of chloroform.

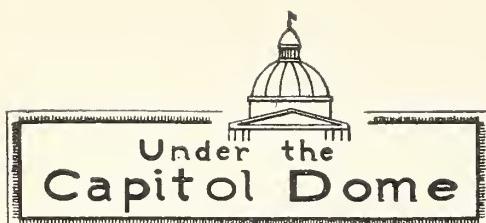
On January 13, 1845, Dr. John Evans, Dr. Livingston Dunlap, and James Blake were appointed commissioners to obtain a site for the State Hospital for the Insane. Mount Jackson, then the residence of Nathaniel Bolton, was chosen. The selection was approved by Legislature, February 19, 1846.

The Indianapolis Medical Society was formed in 1848, with Dr. John H. Sanders elected president, and Dr. Livingston Dunlap as vice-president.

A committee of the Board of Trustees of Asbury University selected Dr. Dunlap to fill the chair of Professor of Surgery and Surgical Anatomy. The school opened in Indianapolis under the name of the Indiana Central Medical College, the first session commencing in the fall of 1849.

Dr. William H. Wishard, who knew Dr. Dunlap well, stated that all of the duties of the different offices were discharged with credit to himself and to the entire satisfaction of the public. He was in great demand as a consultant and had a very large practice. He died September 10, 1862, of pneumonia, having been in active practice for forty-one years.

Following his death, it was said of Dr. Dunlap that "as a man and citizen, in all the relations of life he was unassuming, honorable, moral, and of unwavering integrity; as a physician, he was skillful, faithful, gentle and discreet, seldom failing to win, without apparent effort, the confidence, affection and gratitude of his patients; yet in every respect as physician, friend and associate, he was, in proportion to his very great worth, one of the most undemonstrative of men."



## AUTOMOBILE ACCIDENTS

A decrease of twelve per cent in the number of motor vehicle accidents on the state highway system during the past fiscal year was cited recently by James D. Adams, chairman of the state highway commission, as marking progress in efforts to increase motoring safety in Indiana. During the last fiscal year, 1,861 accidents were reported on the state highways, outside of cities and towns; this figure represents a reduction of 149 accidents over the preceding twelve-month period.

In twenty-five per cent of the accidents reported, striking some fixed object was involved but not necessarily the cause, according to the highway chairman. Records showed that sixty-eight per cent of the accidents occurred on a dry road; fifty-five per cent were on a straight section of highway; and fifty-eight per cent were during clear weather. Less than half of the accidents reported occurred at dusk or after dark. This would indicate that drivers of the vehicles, rather than road and weather conditions, are responsible for motor accidents, Mr. Adams concluded.

## DRUG STORE STANDARDS

Action to raise the minimum standard for drug stores in Indiana and at the same time prohibit the operation of "liquor drug stores" has been taken by the state board of pharmacy.

The action was taken "to properly safeguard public health," the board's resolution stated. Board members explained that the public has the right to feel confidence in any store that holds itself out as a drug store. Under the new rule "the stock of drugs must include such U.S.P., N.F., and other commonly used chemicals, drugs, and preparations sufficient to compound ordinary prescriptions." In addition there must be in the store the latest editions of pharmacy publications. "The drug store should be a suitable, well lighted, and well ventilated room or department with clean and sanitary surroundings devoted primarily to the compounding of prescriptions," the board's ruling said. "The space should be equipped with necessary counters, tables, drawers, shelves and storage cabinets; a sink with hot and cold water, or some facilities for heating water, and proper sewage outlet; poison cabinet, narcotic drug cabinet; and refrigeration storage equipment of a reasonable capacity if biologicals are stocked."

Board members explained that the new regulation will not work a hardship on any reliable drug store, but that it would keep standards high enough that physicians and the public could have confidence in any licensed drug store.

## FOOD SUPPLIES FOR INDIGENT

The Governor's commission on unemployment relief has recommended that families on poor relief be permitted to buy their food supplies rather than receive uniform baskets from township trustees. One of the principal reasons for this suggestion was to prevent the repetition of the same food items week after week, resulting in improper diet, malnutrition, and waste of unusable supplies.

The commission has sent its recommendations to all township trustees who now have the burden of caring for indigent families without the assistance of Federal funds.

In addition to the health angle, the state commission told the trustees that the system of permitting the relief clients to buy their own supplies at any approved grocery was cheaper than the old basket system, which the commission characterized as "inhuman."

## WPA PROJECTS

Two WPA projects that are concerned at least indirectly with health are in progress. At Michigan City three modern playgrounds are being built to meet the need for better recreation facilities for the children of that city. The work includes building tennis courts, ball diamonds, installing playground equipment, building concrete walks, grading, sodding and cinder parking space. At Greenfield work is in progress to change the flow of sewers in the waterworks section in order to separate storm water from sewage and facilitate the operation of the new sewage disposal plant.

## STATE SCHOOL OVERCROWDED

The Fort Wayne State School has carried an approximate average of 1725 feeble-minded patients per day during the past year. There are only 1680 beds in the dormitories. The fact that some patients were sick and in the hospital building made possible this "double duty" for certain beds. The actual minimum bed space in the dormitories would serve for only a few more than one thousand. Such overcrowding seems inhuman but, contrary to most beliefs, is not a product of the times. The exact same percentage of overcrowding at the feeble-minded school was present twenty-five years ago. The population of the State increases about 1% per year. The demand for state care of the feeble-minded has increased 100% in the past twenty-five years. In 1933 the waiting list was cleared up, but today 250 are waiting to be admitted. The present building program by the aid of Federal Grants and State Appropriations will care for the waiting list, but by the time the buildings are erected a sufficient number to fill another building will be seeking admission. Inasmuch as the amented outnumber the demented six to one, it does not come amiss to express that eventually a feeble-minded school will be needed in each district served by each of the individual state hospitals for the insane.

## MEDICO-LEGAL DEPARTMENT

The following question was contained in a letter sent to the Indiana State Medical Association, and Mr. Stump's reply probably will be interesting to a good many Indiana physicians.

**Question:** Has an auditor any authority to cut a physician's bills after the trustee has approved the bills for payment?

**Answer:** The problem of caring for the poor presents many difficulties, some of which were met through the regulations enforced when the federal relief was being extended. Now that the federal relief has been withdrawn, the rules and regulations come back to the local authorities.

The township trustee is the overseer of the poor. He has the right and duty to provide medical care and attention in cases of necessity. If the township levy for the poor yields sufficient funds to take care of those needs that come within the township, then there is no power on the part of the county auditor to pass upon the bills of the township trustee incurred for that purpose. But where the township trustee runs short of funds he can obtain county funds. The allowance of county funds is made by the board of commissioners. The county auditor sits with the board of county commissioners. If he is supported by the county commissioners in revising allowances, then the situation which develops is that the county funds may be withheld where the township trustee has made arrangements which did not meet with the approval of the county commissioners.

It seems that the county auditor in some instances may be assuming authority which he does not possess, but where the county commissioners, under the circumstances here set forth, support the action of the auditor, such action may be as a matter of law regarded as the action of the county commissioners. The pressure they can exert upon the township trustee comes in the possibility of the refusal of county funds to assist in meeting the local necessities within the township.

It would seem that there might be something gained by a friendly discussion, if that can be had, with the auditor and commissioners concerning the relative costs to be borne by the public in the various methods by which hospitalization where necessary may be supplied.

Some of these problems may be worked out through the study of the Governor's Relief Commission, but until they are, it seems that the situation will continue where the township trustee will have the right to make arrangements for the care of the poor, but will find that right subject to some control by the county if the township must look to the county for additional funds.

## DIPHTHERIA DEATHS IN NOVEMBER 1935

Twenty-three deaths from diphtheria occurred in Indiana during the month of November. Three counties had two deaths each, namely, Jackson, Jefferson, and Jennings. Two large counties, Marion and St. Joseph, had three deaths each.

Very interesting is the age distribution, which ranges from fourteen days to fifty years. It is highly significant that only seven of the total number were of school age; of these seven, two were six years old and two were seven years old. The great importance of protecting the pre-school child is apparent from this.

In each of these cases, the definite diagnosis of laryngeal diphtheria is mentioned. This should indicate to the profession the extreme necessity for investigating every case of croup that does not respond promptly to care and medication. Four of the death certificates carry the definite diagnosis of myocarditis as a contributory cause. Four others carry a diagnosis of pneumonia. Two include a diagnosis of nephritis. These factors confirm our understanding of the reasons why people die of diphtheria, namely, obstruction of the larynx, degeneration of the heart muscle, pneumonia, and nephritis.

The number of deaths for the year stands at 105 as compared with 96 at the same time last year. It is obvious from this that the results from the immunization campaign two years ago were not as good as we had hoped. It will be recalled, however, that the campaign did not reach the pre-school child very well. Of the twenty-three deaths reported during the month of November, 1935, there were seven who were either too young to have been immunized at that time, or were of an adult age. During the past year there have been two deaths in children two weeks or less than two weeks old. This is an interesting fact, and probably indicates that the mothers were not immunized, but that the children were exposed to a carrier. If the mother had been a carrier, we would ordinarily expect the baby to be immune at that age. It is very probable that the carrier problem is increasing in importance.

A list showing distribution of the deaths for the year and for the month of November, 1935, is given herewith:

County	No. Deaths Nov. 1935	Total For 1935
Allen	1	9
Bartholomew	1	2
Blackford	0	1
Boone	0	2
Brown	1	2
Clinton	0	1
Crawford	0	1
Dearborn	1	2
DeKalb	0	1
Delaware	0	1
Elkhart	0	2
Grant	0	2
Howard	1	2

(Continued on page 44)

County	No. Deaths Nov. 1935	Total For 1935
Fayette	1	2
Fountain	0	1
Jackson	2	8
Jasper	0	1
Jefferson	2	3
Jennings	2	3
Johnson	1	1
Lawrence	0	4
Lake	0	3
Knox	0	2
Madison	0	1
Laporte	0	2
Marion	3	20
Martin	1	2
Monroe	0	5
Montgomery	0	1
Pike	1	3
Porter	0	1
St. Joseph	3	5
Spencer	0	1
Steuben	0	1
Tippecanoe	0	2
Union	1	1
Vigo	0	1
Warren	1	1
Warrick	0	1
Wayne	0	1
Total	23	105

## DEATH NOTICES



William A. Doeppers, M.D.

## SECRETARIES' COLUMN

WHAT: SECRETARIES' CONFERENCE  
 WHEN: FEBRUARY 2, 1936  
 WHERE: COLUMBIA CLUB  
 INDIANAPOLIS  
 TIME: ONE-THIRTY, P.M.  
 DINNER: AT SIX P.M. NO CHARGE TO  
 COUNTY MEDICAL SOCIETY  
 SECRETARIES

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PROGRAM APPEARS ON PAGE 36 IN  
 THIS ISSUE OF THE JOURNAL.

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THIS MEETING WILL BE DISTINCTLY WORTH  
 YOUR TIME. EVERY SECRETARY OWES IT TO  
 HIS COUNTY SOCIETY TO ATTEND. BRING  
 WITH YOU ANY INTERESTED DOCTORS WHO  
 CAN COME.

*Unintended*  
 CHAIRMAN

WILLIAM AUGUST DOEPPERS, M.D., of Indianapolis, died December fifth, aged forty-three years.

Dr. Doeppers was a lifelong resident of Indianapolis, and graduated from the Indiana University School of Medicine in 1916. He enlisted in the medical corps shortly after the United States entered the World War, and served twenty-one months in base hospital No. 101 at St. Nazaire in France. When he returned to Indianapolis, he served on the staffs of the Methodist and City Hospitals, and was made superintendent of the Indianapolis City Hospital in 1926, which position he held until 1931, when he became connected with the medical department of Eli Lilly and Company.

Dr. Doeppers was for several years treasurer of the Indiana State Medical Association, and was a member of the Indianapolis Medical Society, the Indiana State Medical Association, the Associated Anesthetists of the United States and Canada, and was a Fellow of the American Medical Association.

Editorial comment concerning Doctor Doeppers appears in this issue on page 34.

JAMES E. McHUGH, M.D., of Fort Wayne, died December third, aged sixty-eight years. Dr. McHugh graduated from the Fort Wayne College of Medicine in 1893.

THOMAS ALBERT KEARNS, M.D., of Flora, died December fourth, aged fifty-seven years. Dr. Kearns was a member of the Carroll County Medical Society, the Indiana State Medical Association and the American Medical Association. He graduated from the Medical College of Indiana, Indianapolis, in 1904. He had practiced in Carroll County for thirty years.

EDWARD D. WAGONER, M.D., of Burrows, died November twenty-third, aged sixty-one years. He had practiced in Burrows for the past thirty-two years. Dr. Wagoner had served as coroner of Carroll County, and was a member of the Carroll County Medical Society, the Indiana State Medical Association, and the American Medical Association. He graduated from the Medical College of Indiana, Indianapolis, in 1903.

REAVILL MILLARD WALDEN, M.D., of Evansville, died November twenty-eighth at Rochester, Minnesota. Dr. Walden was forty-six years of age. He had been a member of St. Mary's Hospital staff in Evansville since 1914; he served overseas during the World War. He was the son of Dr. and Mrs. William Walden of Newburgh, Indiana. He graduated from the Louisville Medical College in 1913, and was a member of the Vanderburgh County Medical Society, the Indiana State Medical Association and the American Medical Association.

JAMES M. HICKS, M.D., of Huntington, died December fifth, aged sixty-eight years. Dr. Hicks had practiced in Huntington for more than forty years. He was a member of the Huntington County Medical Society, the Indiana State Medical Association and the American Medical Association. He graduated from the Hahnemann Medical College and Hospital in Chicago, in 1893.

F. NOLAN THORPE, M.D., of Boyleston, died November twenty-fifth, aged fifty-seven years. Dr. Thorpe had practiced at Boyleston for more than thirty years, and was a former Michigan township trustee. He graduated from the Central College of Physicians and Surgeons in Indianapolis in 1905, and was a member of the Clinton County Medical Society, the Indiana State Medical Association, and the American Medical Association.

J. SATER NIXON, M.D., of Indianapolis, died December fourth, aged forty-eight years. Dr. Nixon graduated from the Indiana University School of Medicine in 1912, and was a member of the Indianapolis Medical Society, the Indiana State Medical Association and a Fellow of the American Medical Association, a member of the Associated Anesthetists of the United States and Canada, the Society of Regional Anesthetists, and a life member of the American Medical Association of Vienna, Austria. Dr. Nixon was on the staffs of the Methodist, St. Vincent's and City hospitals in Indianapolis.

RUSSELL E. ADKINS, M.D., of Indianapolis, died December fifteenth, aged sixty-two years. Dr. Adkins was a staff physician at the Veterans Administration Hospital in Indianapolis. Dr. Adkins served as a medical missionary in China after his graduation from the University of Pennsylvania School of Medicine in 1906. During the World War Dr. Adkins served with the medical corps as head of examining boards for tuberculosis in various camps.

## HOOSIER NOTES

Miss Margaret Sage of Brownstown, and Dr. Robert Bruce Hart of Hope were married in Brownstown November twenty-eighth.

Dr. E. L. Somers of Waynedale has opened offices at 628 East Lewis Street in Fort Wayne, in the offices of the late Dr. A. L. Schneider.

Dr. H. C. Rininger has moved from Winchester to New Harmony where he is occupying the offices of the late Dr. K. C. Fitzgerald.

Dr. W. W. Jones has moved from Paoli to Frankfort where he will limit his practice to diseases of the eye, ear, nose and throat.

Dr. Beaumont S. Cornell of Fort Wayne addressed the Defiance (Ohio) County Medical Society, November twenty-sixth, on "Diseases of the Heart."

Dr. Russell B. Hippenstein of Indianapolis addressed members of the parent-teacher group of North Manchester, November nineteenth.

Dr. E. O. Harrold of Marion talked to members of the Marion Lions Club, November twenty-fifth, on the subject of "Noise."

Dr. Walter E. Kruse of Fort Wayne has moved from East Creighton Avenue to new offices in the Wayne Pharmacal Building in that city. Dr. Kruse is coroner for Allen county.

The auxiliary to the Vanderburgh County Medical Society held a program-tea at the home of Mrs. Walter S. Pollard, December third.

Dr. Julia Lindsay Adams of Hanover has opened an office in Madison in the building formerly occupied by Dr. C. C. Copeland. Dr. Adams specializes in diseases of children.

Dr. George Brower, Dr. Dean K. Stinson and Dr. A. E. Stinson of Rochester have moved to their new clinic building, recently completed.

Miss Elva L. Ross of Indianapolis and Dr. Basil L. Merrell of Waynetown were married November twenty-eighth in Waynetown. They will reside in Indianapolis where Dr. Merrell is employed.

Dr. Larue D. Carter of Indianapolis spoke on "The Psychopathic Ward—Its Aims and Benefits" before the Indianapolis Federation of Community Civic Clubs, December sixth.

Dr. M. E. Binet of Paris has come to the United States to extend an invitation to American physicians to attend the International Congress of Hepatic Deficiency which will be held in Vichy in 1937.

Dr. H. K. Mulford was honored with a dinner in celebration of his golden pharmaceutical anniversary at the Union League in Philadelphia, October 31, 1935. The event was sponsored by the National Drug Company.

Fifty surgeons, representing the middlewestern and southern states, discussed orthopedic surgery, November sixteenth, at a clinic held in the Indiana University School of Medicine, Indianapolis. Dr. E. B. Mumford of Indianapolis was chairman.

Dr. Floyd S. Martin has purchased the equipment of the late Dr. J. A. Snapp of Goshen and will take up his practice there. Dr. Martin has been serving as resident surgeon at the Metropolitan Hospital on Welfare Island, New York.

Dr. Albert M. Mitchell of Terre Haute was made president-elect of the Aero Medical Association at the meeting held in San Antonio, Texas, November 2, 1935. The organization consists of government examiners for aeroplane pilots.

The Evansville Post-Graduate Group was addressed by Dr. Leon G. Zerfas of Indianapolis, Tuesday, November 26. The meeting was held at the Vendome Hotel. Dr. Zerfas' subject was "The Treatment of Some Nutritional and Deficiency Diseases in Man."

The first international conference on fever therapy will be held in New York City, September 1936. Five national conferences have been held in the United States, in 1931, 1932, 1933, 1934, and 1935. Further information concerning the conference may be obtained from the secretary, Dr. William Bierman, 471 Park Avenue, New York City.

The December sixteenth issue of *Time* mentions the adoption by the American Heart Association of a group of specialists in angiology, whose secretary is Indianapolis-born Dr. Irvine H. Page, son of the late Dr. Lafayette Page of Indianapolis. Dr. Irvine Page, who is connected with the Rockefeller Institute, has

recently published an article in *Science* concerning hypertension and his discoveries in relation thereto.

During a joint meeting of the International Anesthesia Research Society, the Southern Anesthetists Association, and the Mid-Western Anesthetists Association held in St. Louis the week of November eighteenth, Dr. Floyd T. Romberger of Lafayette was presented a loving cup by the Associated Anesthetists of the United States and Canada, and the International Anesthesia Research Society.

The American Pharmaceutical Association has announced that its Council has officially approved December 16, 1935, as the date when the new National Formulary, sixth edition, will be released for sale in all parts of the country, and has approved June 1, 1936, as the date when the N.F. VI will become official and will supersede the N.F. V. The new formulary represents a complete and thorough revision of N.F. V.

The Nobel prize in medicine this year was awarded to Prof. Hans Spemann, ordinarius in zoology at the University of Freiburg-in-Breisgau, in recognition of his work on what is called the organ-producing effect. His experiments seem to constitute the beginning of knowledge of the causes of organ development from definite portions of the embryo, and are of great biologic significance. Prof. Spemann is sixty-six years of age.

The American Board of Ophthalmology has announced 1936 examinations at Kansas City, at the time of the A.M.A. meeting, May eleventh, and at New York City in October at the time of the meeting of the American Academy of Ophthalmology. All applications and case reports must be filed at least sixty days before date of examination. For application forms, write to Dr. Thomas D. Allen, assistant secretary, 122 South Michigan Avenue, Chicago.

The Scientific Exhibit at the Kansas City session of the American Medical Association will be held in the Municipal Auditorium in conjunction with the other activities of the Association, May 11-15, 1936. Applicants for space must fill out the regular application blank, which may be obtained from Thomas G. Hull, Director, Scientific Exhibit, American Medical Association, 535 North Dearborn Street, Chicago, Illinois. Applications for the Scientific Exhibit close on January 27, 1936. Assignments of space will be made about February 24, 1936.

The United States Civil Service Commission has announced open competitive examinations for social worker positions, applications for which must be on file with the U. S. Civil Service Commission at Washington, D.C., not later than January 6, 1936.

Applications are for the positions of social worker (psychiatric) and junior social worker, and information concerning the positions may be obtained from the United States Civil Service Commission in Washington, or from the post office or customhouse in any city which has a post office of the first or second class.

The American Association for the Study of Goiter again is offering the Van Meter Prize Award of \$300, and two honorable mentions, for the best essays submitted on the goiter problem. Awards will be made at the discretion of the Society at its next annual meeting to be held in Chicago, June 8, 9, and 10, 1936. Manuscripts must be sent to the corresponding secretary not later than March 1, 1936. Information concerning the competition may be obtained from the corresponding secretary, W. Blair Mosser, M.D., Kane, Pennsylvania.

The sixth annual Indiana High School Debaters' Conference was held at Purdue University in Lafayette December 6 and 7, 1935, sponsored by the Division of Speech of Purdue University. On December seventh, Dr. Charles Dudley Saul of Hahnemann Medical College, Philadelphia, talked on "The Case For State Medicine," and Dr. Morris Fishbein took the negative side of the question. The debate question, "Resolved: That medical care should be made available to all citizens at public expense," will be presented in many Indiana high schools during the next few months.



Above is a photograph of one of the exhibits appearing in the health educational exhibit of the Vigo County Medical Society in Terre Haute, October 30, 31, and November 1.

A fine of \$1,200 was recently assessed against Joseph W. Spiker and Frank W. Kimbell of California by the Food and Drug Administration of the U.S. Department of Agriculture. These men promoted "Melatol" which was nothing but crude oil, as a cure for diabetes. The medicine sold at \$5 per box of 112 capsules. The Food and Drug Administration mentions in its report that in the course of its investigation to prove fraud, the characteristic evidence was obtained—deaths from diabetes, ad-

vanced cases again using insulin, mild cases requiring only diet control, or no history of diabetes in spite of the patient's belief that he had the disease.

According to the annual report, the Rockefeller Foundation expended \$12,679,775 during the year 1934, and of this amount \$1,026,200 was appropriated for work in the medical sciences. Aid of four types was given for the advancement of psychiatry: grants to universities and other institutions for the development of research and teaching in psychiatry and associated subjects; endowment and building funds for establishing psychiatric departments; research aid grants to individual workers engaged in important investigations in mental diseases; and fellowships to enable men and women especially qualified for work in this field to obtain advanced training. Gifts also were made for work in neurology and related subjects. An amount of \$2,200,000 was expended in the interest of public health activities, including field research on yellow fever, malaria, hookworm disease, tuberculosis, undulant fever, yaws, and diphtheria.

#### WARNING

A few weeks ago in Columbus, Indiana, a physician was called to see a woman who was supposedly suffering from cancer of the stomach. There was a man, a woman, and a boy of about sixteen years, and they had a federal medical relief slip from Oklahoma, saying that the woman had an inoperable cancer and could get relief only from morphine. The physician offered to administer morphine hypodermically, but the woman refused, saying that she could not take it that way, and asked for morphine tablets. The physician left, saying that he would return in a few minutes with the morphine tablets; he immediately went to the police station, but when he returned with the police, the three people had left the rooming house, and a search of highways revealed no trace of them. Other physicians should be on the look-out for this trio.

In addition to the articles already enumerated the following have been accepted by the Council on Pharmacy and Chemistry of the American Medical Association:

The Calco Chemical Co., Inc.

Tablets Methenamine-Calco, 5 grains

Cutter Laboratories

Diphtheria Toxin for the Schick Test, Diluted Ready for Use

Diphtheria Toxin-Antitoxin Mixture 0.1 L-|- (Goat) ten 3 c.c. vials package

Typhoid-Paratyphoid Prophylactic, 10 vials package

Lederle Laboratories, Inc.

Gas Gangrene Antitoxin (Polyvalent) Without Tetanus Antitoxin, "Globulin-Lederle-Modified"

Tetanus Gas Gangrene Antitoxin, "Globulin-Lederle-Modified"

Parke, Davis & Co.

Gas-Gangrene Antitoxin (Combined) Refined and Concentrated—P.D. & Co.

## INDIANA UNIVERSITY NEWS NOTES

Willard Smullen of Bentonville has been elected president of the Skeleton club, an organization of first year medical students at Indiana university. Meredith Gossard of Kempton is the newly elected vice-president.

A motion picture show on "Modern Methods of Anesthesia" was given at the December meeting of the Theta Kappa Psi honorary medical fraternity at Indiana University. The show, featuring new methods of rectal, spinal, and intravenous anesthesia was presented for the benefit of medical students, pre-medical students and those in the pre-nursing course.

The aptitude test for all pre-medical students who expect to apply for matriculation in any medical schools next September was given Friday, Dec. 6, at Indiana university, under the direction of Dean B. D. Myers of the I.U. School of Medicine. Students taking the examination were required to pay one dollar. The money collected for this test was sent to the secretary of the Association of American Medical Colleges.

Appointment of Albert H. Scheidt as assistant to the administrator of the Indiana university medical school and hospitals has been announced by J. B. H. Martin, administrator. Graduated from the I.U. school of business administration in 1931 with distinction, Mr. Scheidt taught accounting at Ohio State university for two years, when he joined the Noblitt-Sparks Industries of Columbus, Ind. He served on the auditing staff of that organization until called to his present position.

The annual clinic meeting of the Indianapolis Dental society and the Indiana University dental alumni association will be held at the dental school on West Michigan street in Indianapolis during January, according to the announcement of Dr. Gerald D. Timmons, secretary of the dental school faculty and the alumni association.

Meetings in each of the past two years have brought 800 people to the dental school laboratories. Inspection of the school is on the program for the morning, while a full afternoon of dental clinics is being arranged for the meeting. A dinner program will be provided downtown at a place to be announced later, Dr. Timmons said.

Officers of the I.U. dental alumni association in charge of the program are Dr. R. R. Gillis, Hammond, president; Dr. John F. Johnston, Indianapolis, vice-president, and Dr. Timmons. Officers of the Indianapolis Dental society who are joining with the alumni in preparing the program are Dr. A. C. Harvey, president, and Dr. H. C. Percival, vice-president.

More than 200 men are engaged on repairs and improvements to the buildings and grounds of Indiana university in Indianapolis, J. B. H. Martin, administrator of the medical center, announced recently.

Two Federal WPA projects are under way on the 55 acre campus located on West Michigan street, while a third is in progress at the extension center, 122 East Michigan street. The medical center jobs are planned to run twelve months and the extension center project for two months. The program is part of the university's million dollar building and improvement program which will provide three new structures on the campus at Bloomington, plus improvements and repairs to university property in Bloomington and Indianapolis.

One of the projects at the medical center is to complete work already started on campus improvement. The medical center is located on what was originally low and unfertile river bottom land. An extensive program of filling in with fertile soil has been necessary. General landscaping is progressing, with Federal aid.

The present project is designed to complete the general landscaping of the Rotary convalescent home park, of the Ball nurses' home grounds, reforestation of the seven acre tract west of the Ball nurses' home, provision of recreational facilities for children of the Riley hospital, top soiling and sodding a three acre tract adjoining the Kiwanis wing of the hospital, and grading, top soiling, sodding the dental school campus south of Michigan street. One thousand feet of pipe railing is being installed around the parking space south of the dental building.

For this project 140 skilled and unskilled laborers are engaged by the WPA, and their work is expected to continue for one year. The university is supplying material.

The second project at the medical center covers the re-painting of buildings and the repointing of joints in the stone construction. Examination and repair of copper flashings and gutters is being provided.

Repairs to the 3,000 foot tunnel connecting the power plant of the medical center with the three state hospitals, the Ball nurses' home, and the medical school and dental school buildings are under way. Repointing of masonry work on the tunnel is included. A total of 30,000 square feet of painting is involved in this project. The Government, through WPA, is furnishing all skilled and unskilled labor and superintendence for one year, with employment for about 50 men. The university is providing materials, tools and equipment.

The two months' improvement program for the five-story brick building housing the extension center has recently opened. Work being done includes replacing of window sills, building new partitions to increase the number of class rooms, to meet the rapidly growing enrollment, replacing of old partitions with new fire resisting material in compliance with the fire underwriters' recommendations, roof repairs, placing of new cabinets in the chemical laboratory, painting of exterior woodwork, and whitewashing of basement walls.

## SOCIETIES AND INSTITUTIONS

### COUNTY SOCIETY REPORTS

**ALLEN COUNTY (FORT WAYNE) MEDICAL SOCIETY** met at the Chamber of Commerce, November nineteenth, with Dr. Carroll S. Wright of Philadelphia as principal speaker. Dr. Wright's address was entitled, "Treatment of Syphilis." Attendance numbered sixty-one.

At the December third meeting of the Fort Wayne Medical Society, held in the Chamber of Commerce, Dr. Louis J. Hirschman of Detroit presented a paper on "Extra-Colonic Factors in the Etiology of So-called Colitis." Attendance numbered sixty-nine.

Officers for 1936 are:

President: Herbert A. Ray, Fort Wayne  
Vice-president: Juan Rodriguez, Fort Wayne  
Secretary: W. W. Duemling, Fort Wayne  
Treasurer: E. L. Cartwright, Fort Wayne

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**BOONE COUNTY MEDICAL SOCIETY** members met at the Ulen Country Club, Lebanon, December third. Dr. W. E. Pennington of Indianapolis presented a paper on "X-ray Diagnosis." Officers for 1936 were elected as follows:

President: John R. Porter, Lebanon  
Vice-president: L. S. Bailey, Zionsville  
Secretary-treasurer: C. G. Kern, Lebanon

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**CARROLL COUNTY MEDICAL SOCIETY** met at Delphi, December twelfth, with Dr. W. F. Hughes of Indianapolis as principal speaker. Dr. Hughes' subject was "Iritis." Officers for 1936 are:

President: M. C. Thomas, Flora  
Vice-president: Charles Wise, Camden  
Secretary-treasurer: E. H. Brubaker, Flora

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**DEARBORN-OHIO COUNTY MEDICAL SOCIETY** met at Rising Sun, December fourth. Revrend LeCount of Aurora presented a paper on "Ideals of Citizenship." Attendance numbered thirty-two. This was the annual banquet meeting, and officers for 1936 were elected as follows:

President: J. M. Pfeiffer, Lawrenceburg.  
Vice-president: William Duncan, Aurora, R. R. No. 2.  
Secretary-treasurer: J. C. Elliott, Guilford.

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**DELAWARE-BLACKFORD COUNTY MEDICAL SOCIETY** met at the Hotel Roberts in Muncie, November nineteenth, for election of officers, which resulted as follows:

President: J. H. Clevenger, Muncie.  
President-elect: A. C. Retting, Muncie.  
Secretary-treasurer: Donald A. Covert, Muncie.

Members of this society enjoyed a Christmas party, December seventeenth at the Hotel Roberts.

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**ELKHART COUNTY MEDICAL SOCIETY** held its annual meeting at the Alderman Hotel, Goshen, December fifth, for election of officers. Dr. R. L. Senenich of South Bend was the principal speaker. Dr. James A. Work of Elkhart talked on "Communism" and Dr. A. C. Yoder of Goshen made a report upon the last state meeting.

Officers for 1936 are:

President: F. M. Freeman, Goshen  
Vice-president: A. W. Hull, Elkhart  
Secretary-treasurer: S. T. Miller, Elkhart

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**ELWOOD MEDICAL SOCIETY** held its regular monthly dinner meeting at the Elwood Country Club. Dr. R. A. Solomon of Indianapolis was guest speaker, his subject being "New Principles in the Treatment of Diseases."

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**FAYETTE-FRANKLIN COUNTY MEDICAL SOCIETY** met at the McFarlan Hotel in Connersville, December tenth, with Dr. H. H. Wheeler of Indianapolis as principal speaker. His subject was "Diseases of the Rectum." Attendance numbered seventeen. Officers for 1936 are:

President: H. W. Smelser, Connersville  
Vice-president: Stanley Gordin, Connersville  
Secretary-treasurer: R. H. Elliott, Connersville

**FLOYD COUNTY MEDICAL SOCIETY** officers for 1936 are:

President: Carl P. Schoen, New Albany  
Vice-president: Fred Bierly, Jr., Elizabeth  
Secretary-treasurer: P. H. Schoen, New Albany

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**FOUNTAIN-WARREN COUNTY MEDICAL SOCIETY** met at Attica, December fifth. Dr. A. M. Miller of Danville, Illinois, read a paper on "Jane Todd Crawford—Heroine," telling of Dr. McDowell's laparotomy on Mrs. Crawford. This was a joint meeting with the Attica Merchants' Association, and women guests were invited. Attendance totalled 115.

Officers for 1936 are:

President: A. R. Kerr, Attica  
Vice-president: John B. Owens, Veedersburg  
Secretary-treasurer: A. L. Spinning, Covington

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**GIBSON COUNTY MEDICAL SOCIETY** members met at the Methodist Hospital, Princeton, December ninth. Dr. Carl M. Clark of Oakland City talked on "Undulant Fever." A Christmas dinner was supplied by the Methodist Hospital, and programs for 1936 were distributed to members. Election of officers for 1936 resulted as follows:

President: Carl M. Clark, Oakland City  
Vice-president: H. M. Arthur, Hazelton  
Secretary-treasurer: O. M. Graves, Princeton

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**GRANT COUNTY MEDICAL SOCIETY** met November twenty-sixth for its annual meeting at the Hotel Spencer in Marion. Officers for 1936 were elected:

President: E. F. Jones, Marion  
Vice-president: H. Allison Miller, Marion  
Secretary-treasurer: Harold E. List, Marion

The Grant County Society held a ladies' night party, December twenty-seventh.

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**HAMILTON COUNTY MEDICAL SOCIETY** met at Noblesville, December tenth, for an annual home-coming. Fourteen members and ten visitors were present. Officers elected for 1936 were not reported in time to be included in this issue of THE JOURNAL.

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**HANCOCK COUNTY MEDICAL SOCIETY** held its monthly meeting at the Columbia Hotel in Greenfield, November eighteenth. Dr. G. T. Gregory, professor of oral pathology of Indiana University Dental School, was the speaker.

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**HENDRICKS COUNTY MEDICAL SOCIETY** met at Crawley's Hall, Danville, November twenty-sixth. The program consisted of reports of interesting cases by members. Attendance numbered twelve. Officers for 1936 were elected as follows:

President: Milo Aiken, Plainfield  
Vice-president: Carl B. Parker, Danville  
Secretary-treasurer: W. T. Lawson, Danville

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**HENRY COUNTY MEDICAL SOCIETY** members met at Lewisville, December twelfth, with forty-three members and guests present for the annual dinner meeting.

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**HOWARD COUNTY MEDICAL SOCIETY** members held a meeting at Kokomo, December thirteen, for a December party and election of officers. Attendance numbered twenty-eight.

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**HUNTINGTON COUNTY MEDICAL SOCIETY** officers for 1936 are:

President: Fred W. Grayston, Huntington  
Vice-president: R. G. Johnston, Huntington  
Secretary-treasurer: H. D. Brubaker, Huntington

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**INDIANAPOLIS MEDICAL SOCIETY** members met at the Athenaeum, November nineteenth, with the evening devoted to a consideration of diseases of the gastro-intestinal tract. Papers were presented by Drs. H. H. Wheeler, J. H. Gaus, and Walter Stoesser.

On November twenty-sixth, the Indianapolis Medical Society had as speakers Dr. R. G. Leland, director of the Bureau of Medical Economics of the American Medical Association, and Dr. R. L. Senenich, president of the Indiana State Medical Association. The evening was devoted to a discussion of medical economics.

The December third meeting of the Indianapolis Medical Society was devoted to the annual election of officers, which resulted as follows:

President: Karl M. Ruddell, Indianapolis

Vice-president: A. M. Hetherington

Secretary-treasurer: Howard B. Mettel, Indianapolis

On December tenth, a urological symposium was presented by Drs. H. O. Mertz, Roy Lee Smith, and A. F. Weyerbacher, and the December seventeenth meeting was devoted to a discussion of various phases of "Lues." Speakers at this meeting were Drs. John R. Thrasher, John R. Brayton, Robert G. Thayer, and Russell L. Arbuckle.

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JASPER-NEWTON COUNTY MEDICAL SOCIETY met at the McKeever Hotel in Rensselaer, December sixth, with Dr. E. C. English as host. The speaker was Dr. N. K. Forster of Hammond whose subject was "Hernia." Election of officers for 1936 resulted as follows:

President: M. D. Gwin, Rensselaer

Vice-president: C. K. Hepburn, Rensselaer

Secretary-treasurer: W. C. Mathews, Kentland

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JAY COUNTY MEDICAL SOCIETY members met at Portland, December sixth, with Drs. H. L. Murdock and B. W. Rhamy of Fort Wayne as principal speakers, discussing the subject "Undulant Fever." Officers for 1936 were elected:

President: John Lausford, Redkey

Secretary-treasurer: B. M. Taylor, Portland

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JEFFERSON COUNTY MEDICAL SOCIETY met at the Hillside Hotel, Madison, November twenty-sixth. Dr. O. O. Miller of Louisville, Kentucky, spoke on "Modern Treatment of Pulmonary Tuberculosis." Attendance numbered twelve. Officers elected for 1936 are:

President: Anna Goss, Madison

Vice-president: William A. Shuck, Madison

Secretary-treasurer: O. A. Turner, Madison

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JENNINGS COUNTY MEDICAL SOCIETY 1936 officers are:

President: John H. Green, North Vernon

Vice-president: William H. Stemm, North Vernon

Secretary-treasurer: D. L. McAuliffe, North Vernon

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KNOX COUNTY MEDICAL SOCIETY members met at the Union Depot Hotel, Vincennes, December tenth. Dr. E. O. Asher of New Augusta talked on "Something New in Obstetrics." Attendance numbered thirty. Officers for 1936 are:

President: R. G. Moore, Vincennes

Vice-president: E. W. Beckes, Vincennes

Secretary-treasurer: J. F. Reilly, Vincennes

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KOSCIUSKO COUNTY MEDICAL SOCIETY met at the Hotel Hays, Warsaw, November nineteenth, for a dinner meeting. Dr. Fred Clark of Syracuse presented a paper on "Sciatic Pan." A resolution was adopted in memoriam for Dr. C. Norman Howard who died November 11, 1935. Attendance at this meeting was eighteen.

At the December tenth meeting of the Kosciusko County Medical Society, held at the Hotel Hays in Warsaw, officers were elected as follows:

President: Ira Leckrone, Silver Lake

Vice-president: S. C. Murphy, Warsaw

Secretary-treasurer: O. H. Richer, Warsaw

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LAKE COUNTY MEDICAL SOCIETY officers for 1936 are:

President: George Cook, Hammond

President-elect: R. O. Wharton, Gary

Secretary-treasurer: E. M. Shanklin, Hammond

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LAWRENCE COUNTY MEDICAL SOCIETY members met at Bedford, December fourth, for election of officers:

President: C. B. Emery, Bedford

Vice-president: Jasper Cain, Heltonville

Secretary-treasurer: L. H. Allen, Bedford

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MARSHALL COUNTY MEDICAL SOCIETY met at the Hi-Way Inn, Plymouth, December fourth. Dr. R. W. Spenner, of South Bend, presented a paper on "Hypertensive Heart

Disease." Officers elected for 1936 are:

President: T. C. Eley, Plymouth

Vice-president: F. E. Radcliffe, Bourbon

Secretary-treasurer: L. W. Vore, Plymouth

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MONTGOMERY COUNTY MEDICAL SOCIETY met at Culver Hospital, Crawfordsville, November twenty-first, to hear Dr. Emil Vrtiak, of Chicago, talk on "Arthritis." Attendance numbered thirty-six.

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MONROE COUNTY MEDICAL SOCIETY officers for 1936 are:

President: Melville Ross, Bloomington

Vice-president: Phillip Holland, Bloomington

Secretary-treasurer: Dillon Geiger, Bloomington

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MORGAN COUNTY MEDICAL SOCIETY met December tenth at Martinsville. Dr. Gordon Batman of Indianapolis was the speaker.

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MUNCIE ACADEMY OF MEDICINE met December third at the Hotel Roberts to hear Dr. Henry O. Mertz of Indianapolis discuss "The Importance of Urology in General Diagnosis." On December tenth, Drs. D. Roy McCullagh and E. Perry McCullagh of the Cleveland Clinic were speakers.

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NOBLE COUNTY MEDICAL SOCIETY members met at Kendallville, December third. Dr. M. B. Catlett of Fort Wayne presented a paper on "Surgical Treatment of Female Pelvic Disease." Officers elected for 1936 are:

President: J. B. Schutt, Ligonier

Vice-president: J. R. Nash, Albion

Secretary-treasurer: W. F. Carver, Albion

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POSEY COUNTY MEDICAL SOCIETY members met at New Harmony, December twelfth, to hear the report of the delegate to the state convention, and for election of officers:

President: A. L. Woods, Poseyville

Vice-president: H. E. Ropp, New Harmony

Secretary-treasurer: A. E. Jenkinson, Mt. Vernon

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PUTNAM COUNTY MEDICAL SOCIETY met at the Putnam County Hospital, Greencastle, December twelfth, to hear Dr. C. J. McIntyre of Indianapolis discuss "Collapse Therapy in Tuberculosis." Officers elected for 1936 are:

President: C. C. Collins, Roachdale

Secretary-treasurer: Chester A. Hicks, Greencastle

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RUSH COUNTY MEDICAL SOCIETY met at Rushville, December tenth, for a dinner meeting. Dr. James Balch of Indianapolis was the principal speaker. Officers were elected for 1936, but were not reported in time for inclusion in this issue of THE JOURNAL.

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RANDOLPH COUNTY MEDICAL SOCIETY members met at Winchester in December for a dinner meeting and election of officers:

President: Fred McK. Ruby, Union City

Vice-president: J. M. Wallace, Lynn

Secretary-treasurer: L. W. Painter, Winchester

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SHELBY COUNTY MEDICAL SOCIETY members met at Shelbyville, December fourth. Dr. J. H. Milligan of Madison presented a paper entitled, "Why Some of Us Go Insane." Attendance numbered eighteen. Officers elected for 1936 are:

President: M. M. Wells, Fairland

Vice-president: S. B. Coulson, Waldron

Secretary-treasurer: R. M. Nigh, Shelbyville

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ST. JOSEPH COUNTY MEDICAL SOCIETY members met at South Bend, November twelfth, to hear Dr. R. B. Sanders talk on "Diagnosis and Treatment of Pulmonary Tuberculosis." Dr. Ruth Frances Rasmussen of South Bend and Dr. C. H. Hall of New Carlisle were voted into membership in the society.

At the November twenty-sixth meeting of this society, Dr. J. C. Boone discussed "Otitic Infection and the Sequelae."

On December third, the annual business meeting and elec-

tion of officers for the St. Joseph County Medical Society was held at the Children's Dispensary in South Bend. Reports of officers and committees were heard, and officers elected for 1936 as follows:

President: J. E. McMeel, South Bend  
 Vice-president: George Allen, South Bend  
 Secretary-treasurer: J. V. Cassidy, South Bend  
 Asst. Secretary-treasurer: C. M. Sennett, South Bend

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SWITZERLAND COUNTY MEDICAL SOCIETY officers for 1936 are:

President: L. H. Bear, Vevay  
 Secretary-treasurer: R. M. Copeland, Vevay

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TIPPECANOE COUNTY MEDICAL SOCIETY met at Lafayette, December tenth, for a business and social meeting. Attendance numbered thirty-seven. Officers elected are:

President: M. G. Frasch, Lafayette  
 Vic-president: R. H. Wagoner, Colburn  
 Secretary: J. C. Burkle, Lafayette  
 Treasurer: Charles Hupe, Lafayette

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TIPTON COUNTY MEDICAL SOCIETY met at Tipton, November nineteenth, to hear Dr. George Garceau of Indianapolis discuss "Backache."

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TRI-COUNTY MEDICAL SOCIETY (JACKSON, JENNINGS, BARTHOLOMEW COUNTIES) held a meeting November thirteenth at Seymour. W. E. Pennington of Indianapolis was the speaker, his subject being "X-ray Slides of Chest Pathology."

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VANDERBURGH COUNTY MEDICAL SOCIETY met at Evansville, November twelfth, for a dinner meeting. Dr. J. R. Yung of Terre Haute talked on "Toxic Diffuse Goiter—Its Diagnosis and Treatment."

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VIGO COUNTY MEDICAL SOCIETY members met at St. Anthony's Hospital in Terre Haute, November twelfth, to hear Dr. W. E. Stewart present a paper on "Sinusitis." Attendance numbered forty-five.

At the December tenth meeting, Dr. J. S. Coulter of Chicago presented a paper on "Use of Physical Therapy in the Treatment of Chronic Arthritis." Attendance numbered sixty-four. Officers elected are:

President: Henry W. Bopp, Terre Haute  
 Vice-president: James Spigler, Terre Haute  
 Secretary-treasurer: A. M. Mitchell, Terre Haute

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WABASH COUNTY MEDICAL SOCIETY held its meeting for election of officers at the Wabash County Hospital, December fourth, resulting as follows:

President: M. Jordan, Wabash  
 Vice-president: R. M. LaSalle, Wabash  
 Secretary-treasurer: A. J. Steffen, Wabash

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WASHINGTON COUNTY MEDICAL SOCIETY officers for 1936 are:

President: Donald Colglazier, Salem  
 Vice-president: William Green, Pekin  
 Secretary-treasurer: A. M. Baker, Salem

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WAYNE-UNION COUNTY MEDICAL SOCIETY met at Reid Hospital, Richmond, December twelfth, for a dinner meeting and annual election of officers. Attendance numbered twenty-six. Officers elected are:

President: V. C. Griffis, Richmond  
 Vice-president: W. B. McWilliams, Liberty  
 Secretary-treasurer: Gayle Hunt, Richmond

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#### INDIANA STATE MEDICAL ASSOCIATION

##### EXECUTIVE COMMITTEE

November 24, 1935

Roll call showed the following present: H. H. Wheeler, M.D.; O. O. Alexander, M.D.; R. L. Sensenich, M.D.; E. D. Clark, M.D.; A. F. Weyerbacher, M.D.; Albert Stump, attorney, and T. A. Hendricks, executive secretary. In the

absence of Dr. W. H. Kennedy, chairman of the Committee, Dr. Alexander presided.

Minutes of the meeting of October 7, 1935, approved.

The monthly statements of Receipts and Expenditures and reports of the Budget for the Association committees and THE JOURNAL were submitted.

##### Membership report

Number of members on November 24, 1935.....	2790
Number of members on November 24, 1934.....	2728
Gain over last year .....	62
Number of members on December 31, 1934.....	2741

This is the largest number of members in the history of the Indiana State Medical Association. The largest previous number of members was 2767 in 1931.

##### Actions Left Over from 1935 Annual Session at Gary

###### (1) Actions of the House of Delegates and the Council.

###### 1. Appointment of Committee by the President to Consider Amendments to the Constitution

Dr. Kelly: "Since this has now been postponed for one year we should have a committee that should have charge of this matter, and I make you a motion that a committee be appointed by the president to take up the consideration of the Constitution and any amendments that they may see fit to bring in. It should be revised to bring it up to date." (Motion seconded by Dr. J. R. Tracy, and carried unanimously.)

2. Expert Testimony Committee to be continued as requested by Dr. Max Bahr. Reference committee recommended that the report of this committee be deferred for one year.

3. Hospital Insurance. The Reference Committee on Public Policy and Legislation reported that, "In view of the fact that some form of hospital insurance is being considered by hospitals in our state, we feel that this State Medical Association, and we as individuals, should take a definite stand against this form of socialization."

4. High School Debates. The Reference Committee on Public Policy and Legislation recommended that, "In each town where there is a high school debating team, we supply the coach and the team with such material as is necessary to combat this type of medical socialization. We urge each county society to appoint a committee to facilitate this phase of the work."

The following resolution was introduced by Dr. O. W. Sicks:

WHEREAS, Many of the high schools in Indiana are holding debates upon the subject of the Socialization of Medical Practice, and are constantly appealing to the headquarters office of the State Medical Association for information as to where they may obtain material giving the profession's side of the question, and

WHEREAS, the A. M. A. have a large amount of printed material upon this subject, which is available,  
 BE IT RESOLVED, That each county society be urged to obtain a supply of these booklets and place them where they may be easily accessible for use of students preparing for debates upon this subject, and further

BE IT RESOLVED, That when this is done, publicity be given the fact that this material is available, and where it may be obtained.

(Referred to the Reference Committee on Publicity. Reference Committee on Publicity approved the resolution.)

5. Preparation of Pamphlet on Socialized Medicine. Reference Committee on Publicity recommends that, "The president of the Association appoint a committee of three to prepare a pamphlet setting forth the views and policies of this Association concerning the subject of socialized medicine for use of the members of the Association."

6. Traffic Accidents. The special committee on prevention of traffic accidents recommended that, "A committee be appointed to collaborate with the Division of Public Health for the purpose of devising ways and means" to obtain accurate statistics of the number and character of non-fatal automobile accidents and injuries.

The Reference Committee on Hygiene and Public Health approved the committee's suggestions and the report was adopted by the House of Delegates.

7. Memorials to Medical Pioneers. The report of the Bureau of Publicity and the resolution of the Sullivan County

Medical Society were coordinated by the House of Delegates and the following recommendation was adopted—that a committee be appointed by the president to work with the Woman's Auxiliary and committees from the county medical societies to formulate a plan for proper memorials to Jane Todd Crawford, Dr. Jonathan Riehuond, Dr. J. S. Bobbs, and Mrs. Mary E. Burnsworth.

### 8. Proposed Program for 1935-1936.

(a) The Reference Committee on the Reports of Officers recommended acceptance of the proposed program with the statement that "this is a forward step in our graduate education" which "will also better enable physicians to give complete medical care, thereby aiding materially in forestalling the socialization of medicine by lay groups."

(b) Acceptance of invitation of Indiana University School of Medicine to house two-day postgraduate course, with the following points clarified:

- (1) Course will be held on any two days to be designated by the society.
- (2) President of the Indiana State Medical Association will preside.
- (3) Program to be arranged by president of Association, chairman of Graduate Education Committee, dean of the University, and whatever outside help these three may feel is necessary.
- (4) No fee to be charged.
- (5) The first course to be held in the spring of 1936.
- (6) Men of national prominence to be invited.
- (7) Program to be designed to meet the suggestions as outlined in the proposed 1935-36 program.

The Executive Committee authorized Dr. Sensenich to talk with Dr. Gatch in regard to definite plans for a spring graduate education assembly to be held in Indianapolis. Dr. Sensenich is to report back at the next meeting of the Committee.

**9. Appointment of Township Trustees Liaison Committee.** Appointment authorized by the Council. Council Minutes—"Dr. Austin made the motion that 'through the Council the president of the State Association appoint a liaison committee to confer with the Governor's Commission or the township trustees association, if it should be advisable.' The motion was seconded by Dr. Samuel Kennedy, and carried."

**10. Preparation of Obstetrical Pamphlet.** The Reference Committee on Hygiene and Public Health made the following recommendation:

"It is our opinion a pamphlet might be brought out that would especially stress the well-established dos and don'ts of good obstetric practice, and when distributed to the general medical profession would aid in improved care of the mother."

It was suggested that the subject of the preparation of this pamphlet might be taken up with Verne Harvey, director of the State Division of Public Health, with a view to the possibility of having the publication and distribution of this pamphlet a project of the maternal and child welfare department of the State Division of Public Health.

(2) Financial Statement on 1935 Convention was presented.

(3) Complimentary Letters on Convention. Letters were received from many of the out-of-state physicians who were guests at the state meeting, stating that the session was one of the best state meetings they had ever attended. Several spoke of the large attendance and the enthusiasm displayed.

### 1936 Meeting at South Bend

(1) Annual Report for Midwinter Meeting of the Council. Letters have been written to the officers of the St. Joseph County Medical Society giving them an outline for the annual report to be made to the Council at its midwinter meeting. Dr. Sensenich said that the report would be prepared and be ready for the midwinter meeting of the Council.

(2) Dates of the Meeting. Meeting dates set by the Executive Committee for the eighty-seventh annual session are Tuesday, Wednesday and Thursday, October 6, 7 and 8, 1936. These dates were selected so that there would be no conflict with the Interstate Postgraduate Assembly or the American Public Health Association meetings.

(3) Reporting Names of Delegates. The new by-laws provide that the delegates' names shall be reported to the headquarters office by June 1.

### Legislative and Legal Matters

(1) Report made by the executive secretary on the annual convention of the chiropractors.

### Socialization of Medicine

#### (1) High School Debates.

**1. High School Debate Conference to Be Held at Purdue December 6 and 7.** The Executive Committee urges each county medical society to send a representative to be present at this conference and hear the talk by Dr. Morris Fishbein, editor of *The Journal of the American Medical Association*, who will present the question of socialized medicine from the standpoint of the medical profession. It was suggested that the secretary attend this conference. The Committee expressed its appreciation for the invitation extended by the medical profession by Professor P. E. Lull, who is in charge of the conference. It was suggested that, if feasible, pamphlets giving the medical viewpoint in regard to socialized medicine might be distributed at this conference by the medical profession, the suggestion being made that it would be better for some local person to handle this distribution.

**2. Distribution of pamphlets from headquarters office.** Pamphlets have been received from the American Medical Association to be distributed to high school debate coaches and debaters from the headquarters office. A map showing the distribution of this material throughout the state will be prepared.

**3. Copies of material received from Kansas and Wisconsin.** The secretary was instructed to write Minnesota requesting copies of its material.

**4. Suggestion made that copies of the Kansas, Wisconsin, and Minnesota pamphlets be carried in THE JOURNAL and that a copy of the Fishbein-Leland-Aly-Foster debate be copied in THE JOURNAL.**

**5. What answer can be made to the fact that Dr. Ray Lyman Wilbur, past president of the American Medical Association, favors the socialization of medicine?** The answer is that Dr. Wilbur never practiced medicine a day in his life.

**6. Debate handbooks.** Copies of the debate handbooks prepared by Bower Aly, assistant professor of English, University of Missouri, brought to the attention of the Committee. These handbooks may be purchased from Lucas Brothers, publishers, Columbia, Missouri. It was noted that the editor of these handbooks, although he is supposed to be neutral on the question, took part on the affirmative side in the recent nationwide radio debate on the socialization of medicine.

**7. Contact with Bureau of Public Discussion, Indiana University.** Conferences have been held with Mrs. Adela Bittner who is in charge of the Bureau of Public Discussion, Indiana University, and arrangements have been made with her for distribution of debate material to high school students.

**8. Pamphlets received from American Medical Association.** 500 copies each of the following pamphlets have been received from the A. M. A.: *Sickness Insurance Catechism*  
*Sickness Insurance not the Remedy*  
*Some Defects in Insurance Propaganda*  
*A Critical Analysis of Sickness Insurance*

100 each of the following pamphlets also have been received from the A. M. A.: *Income from Medical Practice*

*Net Incomes from Medical Practice—A Supplementary Report*

*Prepayment Plans for Hospital Care*

*Health Insurance in England and Medical*

*Society Plans in the United States*

*Group Hospitalization Contracts are Insurance Contracts*

*Group Practice*

*Contract Practice*

*The Costs of Medical Education*

*New Forms of Medical Practice*

*Handbook of Sickness Insurance, State Medi-*

*cine and the Cost of Medical Care*

**9. Lack of material for negative side.** Many letters have been received stating that there is a lack of material on the negative side of the debate. By distribution of the above pamphlets to debaters and coaches, it is the hope of the committee that this criticism might be overcome.

**Social Security Act**

(1) Position of liaison officer for Dr. Harvey's office still unfilled.

(2) Report on conference with Dr. Harvey and Dr. Albert McCown made by the president and secretary of the State Medical Association. Dr. McCown and Dr. Harvey have indicated that they want to carry out the provisions of this act through and with the support of the medical profession. In Indiana the program is to be one essentially of graduate education of the physician.

(3) **Care of crippled children.** It has been stated by some health and welfare groups that under the Social Security Act all crippled children are to receive care from government funds irrespective of the fact that their parents or guardian may or may not be able to pay for such care. According to Dr. Harvey there is no authority whatsoever for such a statement. It is the sentiment of the Committee that medical services to crippled children under the Social Security Act should not be concentrated in Indianapolis but centers should be established throughout the state.

**Health Insurance and Group Hospitalization**

(1) Bulletin from the Medical Society of the District of Columbia states that group hospitalization has been a success.

(2) Digest of Sickness Insurance Pamphlet received from the Chester County Medical Society, Pennsylvania.

(3) **Letter from NEW YORK HERALD TRIBUNE.** Letter received from city desk of HERALD TRIBUNE asking "if it is likely that your state legislature will be urged to enact health insurance legislation this winter?" The secretary was instructed to answer the letter stating that such was not likely to be the case.

**Indigent Sick**

(1) A committee has been appointed to meet with a committee from the Township Trustees' Association on November 26. This committee is appointed at the suggestion of Charles Marshall, director of finance of the Governor's Commission on Unemployment Relief, and upon authority of the Council of the Indiana State Medical Association.

(2) Copies of the Illinois and the Kansas plans for the care of the indigent sick have been forwarded to members of the committee.

**Midwinter Meeting of the Council**

Sunday, January 12, 1936, set for this meeting which will be held at the Indianapolis Athletic Club.

**Secretaries' Annual Conference**

Date set, Sunday, February 2, 1936, Columbia Club, Indianapolis.

**Fees in Automobile Accident Cases**

The Ohio State Medical Association is studying the problem of lien law legislation to cover fees for services rendered in automobile accident cases. In Indiana the situation is still unsatisfactory. In a talk before the American College of Hospital Administrators at St. Louis in September, Governor McNutt of Indiana stated that "Some guarantee, probably from the trustee of the township in which the individual resides, would relieve the hospital and would seem to be just as reasonable as the guarantee which the trustee grants that an indigent individual will not starve or freeze," and suggested that anyone who "goes a-touring into another state" should by law be made to carry a certificate showing that he can and will pay any medical and hospital bills necessitated by an accident.

**Income Tax**

Blanks received from the Department of Treasury of the State of Indiana upon which to make application for the exemption from payment of state gross income tax by the State Association.

Mr. Stump reported that it is not necessary to fill out blanks for federal income tax exemption for the Association. He is to send a letter to the headquarters office stating that fact.

**Northwest Regional Conference, Chicago**

The executive secretary was authorized to attend the Northwest Regional Conference to be held in Chicago, Sunday, February 16, 1936.

**American Red Cross First Aid Stations**

Letter from Dr. D. R. Ulmer, chairman of the Regional Fracture Committee of the American Red Cross, brought to

the attention of the Committee. This same letter was sent to the secretary of each county medical society, asking that each society send the names, addresses, and telephone numbers of five doctors who will be available to take care of emergencies as they occur upon the highways. The Executive Committee recommended that each county medical society secretary send to Dr. Ulmer, as men eligible to do the work, a complete roster of the membership of the county medical society in question, if the society desires to cooperate with the Red Cross in its first aid program.

**THE JOURNAL**

(1) **Report on advertising submitted.**

(2) **Envelopes for mailing THE JOURNAL.** The Committee decided to purchase envelopes for mailing THE JOURNAL, authorizing the purchase of quantity lots in order to cut down the per unit cost.

(3) **Size of THE JOURNAL in 1935.** The 1935 volume of THE JOURNAL will contain 704 reading pages, equaling the peak volume of 1931. This number does not include the eight-page insert of Milbank's talk, published as a supplement to the February 1935 issue. The 1934 volume contained 604 reading pages.

(4) **Advertising of Scientific Instruments Company.** This is to come up at the next meeting of the Committee for final consideration.

(5) **Extra Copies of Magazines.** The Committee went on record that any member of the Association desiring more than two extra copies of THE JOURNAL should be charged at the rate of 35c each for such extra copies. To anyone else the cost would be the regular charge of 50c per copy.

(6) **Liquor Advertising.** The New York State Medical Society asked its House of Delegates to decide upon the acceptance of liquor advertising for its Journal. The House of Delegates of that society went on record that such advertising may be accepted. Whether or not such questions should be brought up before the House of Delegates of the Indiana State Medical Association is to be brought up for consideration at the midwinter meeting of the Council.

(7) **Printing of THE JOURNAL.** The members of the Executive Committee who live in Indianapolis were appointed as a committee to decide who should print THE JOURNAL. Bids were received by the Committee from W. B. Conkey Co., Hammond; Hammel & McDermott, Indianapolis; C. E. Crippin & Son, Indianapolis; Qualityprint, Inc., Shelbyville; Indianapolis Commercial Printing Co.; Central Pub. Co., Indianapolis; C. E. Pauley & Co., Indianapolis; Bruce Publishing Co., St. Paul; Samuel R. Guard, Spencer, Ind.; Haywood Pub. Co., Lafayette; Keller-Crescent Co., Evansville; Hibberd Printing Co., Anderson; Commercial Printing Co., Anderson; Cornelius Printing Co., Indianapolis; Wayne Paper Box & Ptg. Co., Ft. Wayne; Levey Printing Co., Indianapolis; R. R. Donnelley & Sons, Chicago; and Bookwalter-Ball-Greathouse, Indianapolis.

(8) **Listing of Committees in JOURNAL.** The Committee felt that there was no need to differentiate in THE JOURNAL between the standing and the special committees.

There being no further business, the meeting was adjourned.

**BUREAU OF PUBLICITY**

November 5, 1935

Present: William N. Wishard, M.D., chairman; E. D. Clark, M.D., and T. A. Hendricks, executive secretary.

Release on "High School Debates" read and approved for publication in Saturday papers, November 23.

Reports on medical meetings:

Oct. 31—Vigo County Health Educational Exhibit. "Automobile Accidents as a Health Hazard." 75 present.

Nov. 1—Vigo County Health Educational Exhibit. "Common Contagious Diseases of Childhood." 60 present.

Oct. 31—Vigo County Health Educational Exhibit. "Common Skin Diseases." 75 present.

Letter received from an Indianapolis newspaper in regard to a health campaign which was to be paid for by the manufacturers and various commercial firms of the city.

The Bureau felt that although the material outlined to be used in such a campaign was of high quality, it did not feel it should give official approval to this campaign because basically it would be commercial in nature.

Following are the actions of interest to the Bureau of Publicity taken at the annual session of the State Association at Gary:

- (1) **Annual Bureau report.** The report of the Reference Committee on Publicity follows:

"We approve of the report of the Bureau of Publicity as published in the handbook of 1935. We desire to commend the very effective and fine work which has been done in furnishing the lay public with valuable and scientific information relative to curative and preventive medicine."

- (2) **Memorial to medical pioneers.** The House of Delegates approved both the Sullivan county resolution and the report of the Bureau of Publicity, and the Reference Committee on Publicity reported as follows in regard to this subject:

"Your committee recommends that a committee be appointed by the president of the Association to work with the Woman's Auxiliary and the committees of the county medical societies to formulate a program and plans for proper memorial tributes to Mrs. Crawford, Dr. Richmond, Dr. Bobbs and Mrs. Burnsworth."

- (3) **Historical work of the Bureau.** Report of the Reference Committee on Publicity follows:

"The committee wishes to compliment the historian for the Association for his very thorough and interesting historical articles which have appeared in THE JOURNAL. The presentation of the historical parts contained in the various articles should be an incentive to all county medical societies to appoint an historian to collect and present to their association members the many interesting historical facts with which most every community is richly endowed."

The Reference Committee on the Reports of Officers made the following comment upon the report of the historian:

"Your committee moves to accept the report of the historian and believes that he is doing much to interest the profession of this state in medical history. This work entails great effort and expenditure of time on his part, and we believe it is appreciated."

- (4) **High school debates.** The Reference Committee on Publicity approved the resolution upon high school debates introduced by a delegate from Marion county:

"WHEREAS, Many of the high schools in Indiana are holding debates upon the subject of the Socialization of Medical Practice, and are constantly appealing to the headquarters office of the Indiana State Medical Association for information as to where they may obtain material giving the profession's side of the question, and

"WHEREAS, the A. M. A. have a large amount of printed material upon this subject, which is available,

"BE IT RESOLVED, that each county society be urged to obtain a supply of these booklets and place them where they may be easily accessible for use of students preparing for debates upon this subject; and be it further

"RESOLVED, That when this is done, publicity be given the fact that this material is available, and where it may be obtained."

The Reference Committee on Public Policy and Legislation in its report recommended that "in each town where there is a high school debating team we supply the coach and the team with such material as is necessary to combat this type of medical socialization. We urge each county society to appoint a committee to facilitate this phase of the work."

- (5) **Pamphlet on socialization of medicine.** The Reference Committee on Publicity recommended that the president of the Association appoint a committee of three to pre-

pare a pamphlet setting forth the views and policies of the Association concerning the subject of the socialization of medicine for use of the members of the Association.

- (6) **Code of Medical Ethics resolution.** A delegate from Marion county offered the following resolution regarding the violation of the Code of Medical Ethics of the American Medical Association:

"WHEREAS, the report of the Judicial Council of the American Medical Association June 1935 calls attention to the fact that gross violations of the Code of Ethics by individuals, groups and institutions are frequently ignored because no individual member of a society dared jeopardize his own standing by bringing charges, and

"WHEREAS, the American Medical Association desires to make further studies of the best methods to handle this problem,

"BE IT RESOLVED, that the Committee on Publicity of the Indiana State Medical Association study this problem in order that they may make suggestions to the American Medical Association which may be helpful in arriving at the best solution of our difficulties in handling violations of the Code of Ethics."

This resolution was referred to the Reference Committee on Miscellaneous Business which reported favorably upon it, the report being unanimously adopted by the House.

The Bureau instructed the secretary to communicate with the American Medical Association in order to find out what the results have been to date in the study that has been made concerning the Code of Medical Ethics referred to in the resolution presented upon the subject at Gary.

Letter concerning the practices of a cultist, from a physician in the southern part of the state, brought to the attention of the Bureau. The Bureau instructed the secretary to take the matter up with the State Board of Medical Registration and Examination.

Request received by the Bureau for information concerning the work of the Bureau from the Delta (Colorado) County Medical Society. The secretary was instructed to answer this letter and to state that the Colorado State Society secretary had come to this state and had made an investigation into the work carried on by the Bureau of Publicity and the headquarters office of the State Association.

The article in THE INDIANA PARENT-TEACHER BULLETIN entitled, "Don't Spoil Good Food," brought to the attention of and approved by the Bureau.

#### LOUISVILLE EYE AND EAR SOCIETY

In the passing of Dr. Walter J. Leach of New Albany, on September 29, 1935, the Louisville Eye and Ear Society has suffered the loss of one of its most valued and faithful members. Dr. Leach has been a member of the Society since its organization. He was one of its most conscientious and ardent workers and did much to carry it over the struggles of its early days. Those same qualities which characterized his work in the medical activities of Indiana and which were given recognition by his election last year to the presidency of the Indiana State Association, were conspicuous in his activity in our society. He was faithful in attendance, helpful in his contributions to the scientific programs, and resourceful regarding the general conduct of our affairs. He was respectful of the opinion of his confreres, kind in his criticisms and loyal in his friendships. We mourn his untimely death.

In recognition of these qualifications, be it resolved that the Louisville Eye and Ear Society extend its deepest sympathy to the members of the bereaved family in their irreparable loss.

Be it further resolved that a copy of these resolutions be spread upon the minutes of this society, a copy be furnished his family, and a copy be sent to the Indiana Medical Journal for publication.

Austin Funk  
Adolph O. Pfingst,

**OTITIS—Continued**

(Continued from page 20)

Dr. Cassady's paper is of interest because it presents viewpoints from the French school, and certainly offers a finer differentiation of the pathology of acute otitis media than we usually make in this country. Personally, it is hard for me to see how we can make a diagnosis of simple otitis media clinically, since practically every otitis must of necessity be a simple one before necrosis begins.

D. O. KEARBY, M.D. (Indianapolis): This paper is worthy of a good deal of discussion. Dr. Sage brought out points that I wanted to mention. The interesting thing in bringing out new classifications is that it gives us something to think about in visualizing the pathology going on in the middle ear.

Most of us think of middle ear suppuration as follows: invasion of the mucous membrane with bacteria; migration of leukocytes; transudation of serum; filling of the middle ear cavity and bulging of the drum. Like Dr. Sage, I wondered if I could ever tell when I had a mild type and when it is going to be a necrotic type. I believe that most of us would have to wait and see whether it is the necrotic type.

I want to emphasize the point Dr. Sage has made about sinus infection going along with middle ear infection. I would go even further than transillumination, especially when it comes to mastoiditis. I never do a mastoid any more without investigating the antrum, especially in children. It has been my practice for several years and I find, in almost every case, infection in the sinuses.

DR. CASSADY (closing): The differentiation between clinical necrotic and simple, acute otitis is difficult, especially during the first day or two. After the perforation has attained its maximum size and the acute septic phase of the disease is subsiding, it is possible to judge by the size and the location of the perforation whether it is a simple or a necrotic type of otitis.

In Dr. Sage's remarks about the catarrhal type, the reason for removing it from this classification is that it is not associated with bacteria, but is a mechanical exudate.

**INDIANA STATE DIVISION OF PUBLIC HEALTH****BUREAU OF COMMUNICABLE DISEASES**

Monthly report, November, 1935

Diseases	Nov. 1935	Oct. 1935	Sept. 1935	Nov. 1934	Nov. 1933
Tuberculosis	125	171	130	112	129
Chickenpox	407	226	33	438	590
Measles	41	50	19	414	93
Scarlet Fever	682	624	229	731	900
Smallpox	11	6	1	12	12
Typhoid Fever	11	26	61	31	41
Whooping Cough	150	109	123	364	119
Diphtheria	291	470	177	277	489
Influenza	104	103	93	134	217
Pneumonia	72	73	83	29	58
Mumps	103	76	17	14	24
Poliomyelitis	9	13	10	5	4
Meningitis	6	8	8	1	8
Vincent's Angina	5	5	0	0	0
Encephalitis					
Lethargica	0	1	0	5	3

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### INDIANA H. S. DEBATE CONFERENCE—Continued

(Continued from page 37)

seemed to be presentable from affirmative sources, I believe that this will result in a wonderful opportunity for organized medicine to find an interested audience. The correctness of our views will be appreciated by that great mass of thinking American citizens, who will be found listening to debates of this character. Instead of increasing the popularity of social adventures in medical practice, most people will be confirmed in their judgment that the present method is very acceptable and should be maintained, subject, of course, to that constant change which any living organism must submit to in adapting itself to its changing environment. I have been impressed with the fact that nowhere at any time in this debate has there been any question of the value of the science of medicine or the value of its application through practitioners of medicine. The unquestioning acknowledgment of this factor is especially gratifying in view of the recent rise of many cults whose members have spent a tremendous amount of time, money, and effort in selling their peculiar ideas to the public, and yet, after a generation, we find the acceptance of this question solely on the basis of an acknowledged value, which is so highly esteemed that those of us who are especially big-hearted in our impulses, especially when no personal cost is incurred, seem to feel that these values should be made available to all the public without expense, other than public expense. I am sure that the debate is going to rebound tremendously to the benefit of organized medicine, which means, of course, to the benefit of the art and science of medicine.

Attendants at the Indiana High School Debaters' Conference at Purdue University, Lafayette, December sixth, included the following physicians: M. G. Frasch, W. W. Washburn, Floyd T. Romberger, W. M. Reser, J. W. Shafer, J. C. Burkle, C. M. Jordan, G. R. Clayton, John A. Morrison, F. S. Crockett, Gordon A. Thomas, H. G. Martin, A. J. Bauer, A. M. Schrieber, and F. L. Pyke, all of Lafayette; S. E. McClure, Monon; W. H. Altier, Fowler; W. U. Kennedy, Newcastle; Morris Fishbein, Chicago; S. M. Cotton, Tipton; Charles C. Crampton, Delphi; H. F. Beckman, C. H. McCaskey, and Mr. Tom Hendricks of Indianapolis; D. F. Cameron, Lyman T. Rawles, E. C. Singer, C. B. Parker, all of Fort Wayne; and R. L. Sensenich of South Bend. Dr. Rawles and Dr. Parker of Fort Wayne accompanied twenty students from Fort Wayne Central High School who attended the debate conference.

### CORRECTION

In the membership roster of the Indiana State Medical Association as published in the December JOURNAL, under Terre Haute, Vigo County, the name Noah S. McBride should have been Noel S. McBride.

# THE JOURNAL

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### ORIGINAL ARTICLES

#### SOME CHANGING CONCEPTS REGARDING THE ENDOMETRIUM AND THEIR SIGNIFICANCE\*

VIRGIL S. COUNSELLER, M.D.†  
WALLACE EDGER HERRELL, M.D.†

ROCHESTER, MINNESOTA

Menorrhagia, metrorrhagia, and amenorrhea have always been difficult problems in diagnosis and treatment. There probably are no other physiologic disorders which have been treated more

diversely than those of menstrual function, and up until the present time, there has been little if any improvement in treatment. The reason for this failure of treatment lies in the fact that the underlying factors producing the disturbance have not been well understood.

The research work of the endocrinologists in ovarian and pituitary hormones has begun to focus some light on the subject. A series of special articles on glandular physiology and therapy appearing in recent issues of the JOURNAL of the American Medical Association, under the auspices of the Council on Pharmacy and Chemistry, reveal the progress made in study of the hormones of the ovary and pituitary gland and their therapeutic effect on the endometrium. Great caution is urged in the therapeutic use of estrogenic and luetinizing hormones until their value has been more definitely proved,

\* Read before the annual meeting of the Indiana State Medical Association, Gary, Indiana, October 10, 1935.

† From The Mayo Clinic and The Mayo Foundation, Rochester, Minn.

both clinically and in the experimental laboratory.

Our purpose in this paper is to simplify the question of diagnosis, and if possible treatment, of the menstrual irregularities by advocating histologic study at biopsy of specimens of endometrium in various phases of the menstrual cycle, and when possible to substitute the hormone therapy, which the histologic picture reveals to be indicated.

The essential features of the menstrual cycle have been recorded by many investigators, but a much clearer conception would be obtained if there were correlation between the observed state of the



V. S. COUNSELLER

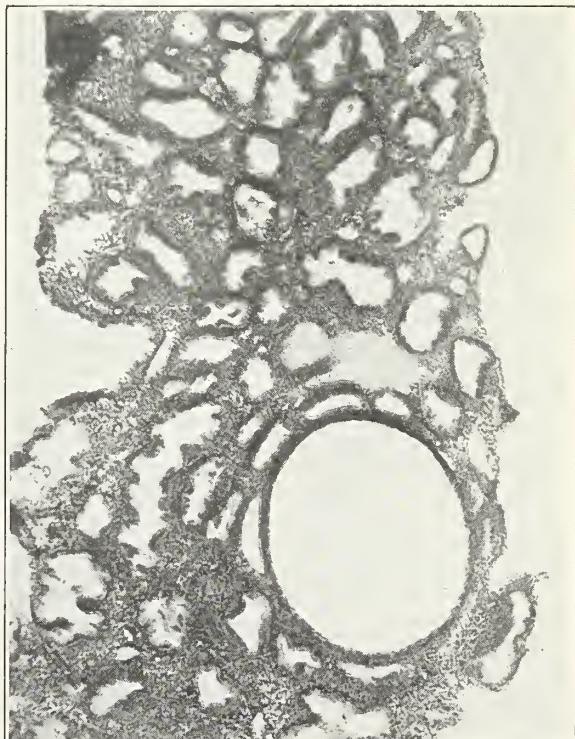


Fig. 1. Specimen of endometrium in late differentiative phase but showing cystic areas. The patient was forty-five years of age and had some symptoms of approaching menopause; the cycle, however, was still normal and regular (x50).



Fig. 2 Endometrium in the persistent early proliferative phase (x50).

endometrium and the clinical picture and a uniform system of reporting the several phases. With this idea in mind, one of us (Herrell)<sup>1</sup> recently undertook a study of human endometrium and attempted to apply the principles of regeneration and to correlate the observed states of the endometrium with the basic physiologic principles at work in the process. Subsequent application of the results of this study to the clinical problems of menstrual disorders has considerably clarified and simplified treatment.

The standard classification of the state of the endometrium during the menstrual cycle, as accepted by leading gynecologists, consists of: (1) the post-menstrual phase, (2) the interval phase (called by some, resting endometrium), (3) the pre-gravid or premenstrual phase, and (4) menstruating endometrium. Normally, the process is a continuous one and is characterized by loss of tissue and by regeneration. Histologically, this process is divided into four phases: (1) loss of tissue, (2) a phase of regulation, characterized by cell reorganization and migration in the area of tissue loss, (3) a phase of cell proliferation, characterized by many mitotic figures and rapid increase in the size of the regenerating area, and (4) a phase of cell and tissue differentiation, accompanied by decline in cell proliferation and growth in the regenerating area.

<sup>1</sup> Herrell, W. E.: Histologic studies of the endometrium during various phases of the menstrual cycle: preliminary report. Proc. Staff Meetings of Mayo Clinic. 10:168-175 (March 13) 1935.

The menstruating phase of tissue loss has been shown to be complete in the first twenty-four hours of menstruation and the remainder of the period is one of hemorrhage and secretion. The next twenty-four hours is the phase of reorganization, rearrangement, and migration of cells. It is in this phase that one can see resurfacing of the endometrium to be taking place from the cells of the remaining glands in the basal layer.

On the basis of regeneration of tissue, we have been able to classify the menstrual cycle roughly into four phases, these phases being readily recognized by a few simple criteria:

The classification now used by us in reporting the various phases of the menstrual cycle is as follows: (1) early proliferative phase which normally lasts approximately seven days to (2) late proliferative phase which ends approximately on the fourteenth day, (3) early differentiative phase which is completed approximately on the twenty-first day, (4) late differentiative phase which ends the last part of the fourth week of the normal cycle.

#### EARLY PROLIFERATIVE PHASE (FIRST TO SEVENTH DAY)

This phase is characterized by active cell division, resurfacing of the endometrium, and formation of new, straight tubular glands from the surface epithelium. Mitosis is active, and cellular

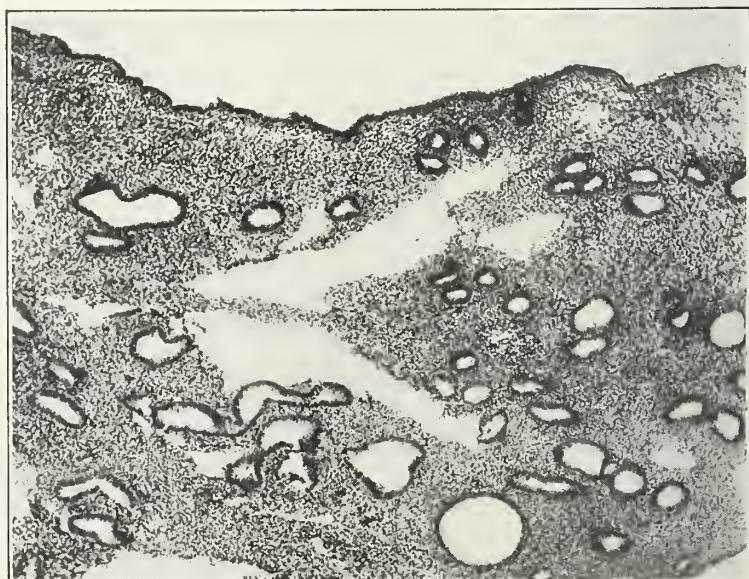


Fig. 3 Endometrium in the persistent early proliferative phase showing cystic areas (x50).

proliferation occurs also in the stroma. At the end of this phase the endometrium presents a fairly typical picture. The average number of tubular glands per low power field is three to four, and they are nearly straight tubules; the epithelium of the gland is of the low columnar type and the nuclei are situated near the center of cell. The endometrium is now becoming thicker and measures approximately 1 mm. From this data, it is always possible to postulate the approximate date of the last period, and therefore the phase in question. If the specimen is viewed in cross section, the tubular glands will appear as small circles instead of tubules.

#### LATE PROLIFERATIVE PHASE (8TH TO 14TH DAY)

This phase corresponds to what has previously been designated by others as "resting endometrium," but this study has shown that such a condition does not really exist, since the very nature of the process of cyclic regeneration prevents such an occurrence. The process is a continuous one of regeneration and repair. During this phase, proliferation is seen to continue rapidly; new glands form from the surface epithelium and the cells of the stroma increase greatly in number. The rapidity of the process is shown by the fact that, by the end of the second week of this phase, the average number of glands per low power field is six to seven instead of three to four. The character of the glands is essentially the same; although they are somewhat dilated they show practically no differentiative changes. It is significant that this phase corresponds roughly to the life of the follicle, so that one can assume that the proliferative phase of the regenerative process is dependent on the activity of the follicle. Failure of follicular activity near the end of this phase is noted in the decline of proliferation and also in the fact that there is only a slight proliferation in the subsequent phase.

#### EARLY DIFFERENTIATIVE PHASE (15TH TO 21ST DAY)

One of the earliest indications of differentiation is the beginning convolution of the longitudinal glands. The epithelium, which up to this time has been of the proliferative type, that is, low columnar epithelium, changes to the columnar types, and the nuclei approach the base of the cells. The only remaining evidence of proliferation is an increase of cells in the stroma. By the end of the third week the endometrium grossly is about 3 to 3.5 mm. thick; the number of glands, however, is not increased as compared with the proliferative phase, the average number remaining six to seven per low power field. These glands are dilated and the stroma appears increased by compression. It is noteworthy that this phase is identical with that of early activity of the corpus luteum and failing follicle, which histologically is expressed as decreasing evidence of proliferation and a rather

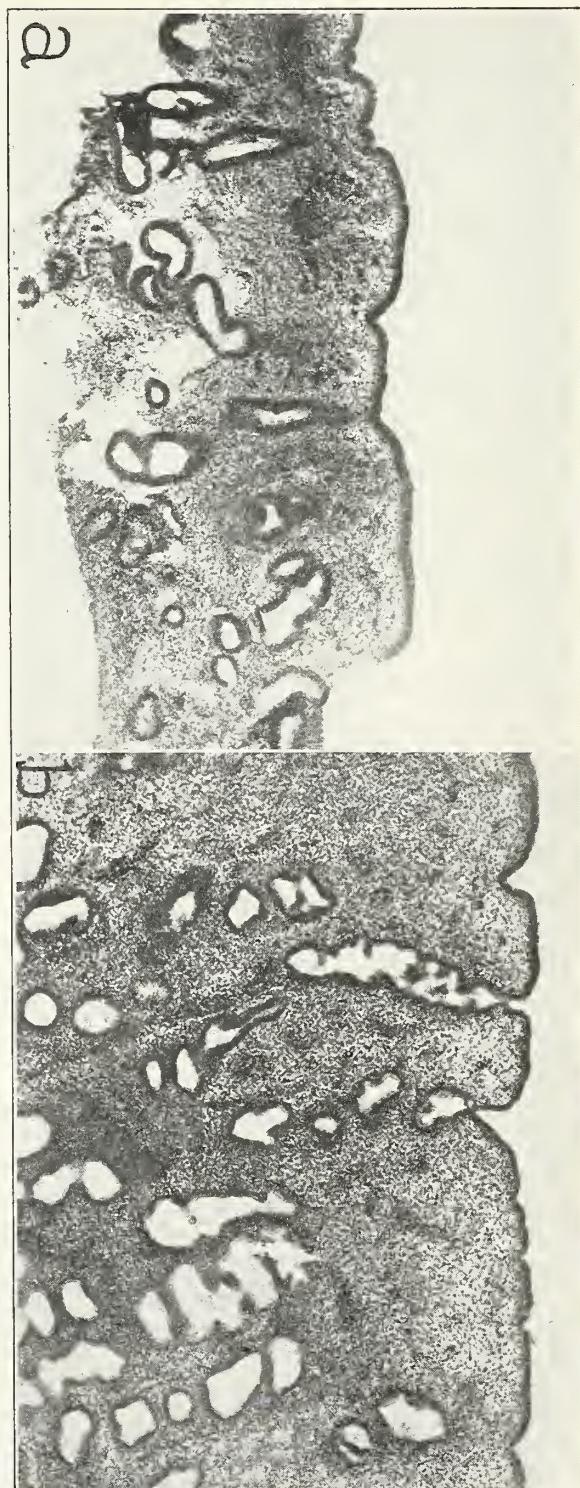


Fig. 4a. Endometrium in the persistent late proliferative phase. The glands are straight but dilated tubules lined by proliferative epithelium. Biopsy was performed in the fourth week of the cycle (x50); b, late differentiative phase. The endometrium is practically normal. Biopsy was performed in the fourth week of the cycle after five months of treatment (x50).



Fig. 5. Endometrium in the persistent early differentiative phase, which is essentially the same as that seen in third week of a normal cycle (x50).

sudden onset of all the characteristic features of differentiation.

#### LATE DIFFERENTIATIVE PHASE (22ND TO 28TH DAY)

Differentiation is at its height in this phase and is characterized by the glands appearing to be twisted on their long axes, producing a typical corkscrew appearance. The epithelium of the glands presents a saw-tooth appearance when viewed in longitudinal section. We believe that this twisting is a characteristic of differentiation whereby the surface area is increased. The functional activity of the epithelium is indicated by the decreased nucleo-cytoplasmic ratio, a distinct differentiative phenomenon. Other evidence of differentiation is the increase of glycogen in the columnar cells, the nuclei being displaced toward the basement membrane. The lumens of the glands are increased considerably in size and the stroma appears compressed. The endometrium now measures approximately 4 mm. thick, but the number of glands per low power field remains the same as at the end of the proliferative phase. Menstruation may now occur under normal conditions, and it becomes evident by engorgement of the stroma and infiltration with wandering cells, together with some oedema near the surface.

#### HYPERTROPHIC ENDOMETRIUM

The term "hypertrophic endometrium" is one which has been used previously by other investigators to designate the state of the endometrium, but accord-

ing to these studies it conveys little knowledge concerning the histology of the endometrium. In order to settle this point a study was made (by Herrell) of 188 specimens in which a diagnosis of hypertrophied endometrium was made in the Section on Pathology. The clinical history was not consulted until the phase of the cycle had been determined according to the criteria previously reported. A careful analysis of the data obtained revealed no justification for a diagnosis of hypertrophy without qualification.

Table 1 gives a striking evidence that both the proliferative and differentiative phases of the cycle have been confused with hypertrophy. Although the diagnosis of hypertrophy was made frequently in the late differentiative phase, it not infrequently was made in the early proliferative stage when the endometrium was less than 1 mm. thick.

#### INDICATIONS OF OVARIAN FAILURE

In the routine microscopic study of a large number of specimens from patients with ovarian dysfunction, cystic areas have been encountered (Fig. 1). Previous investigators who have observed these areas maintained that they were indicative of hyperplasia; however, these studies have shown this view to be incorrect by virtue of the fact that the cystic areas have been observed in all phases of the cycle rather than under conditions of hyperplasia. In all cases in which cystic areas were observed, there has been clinical evidence of

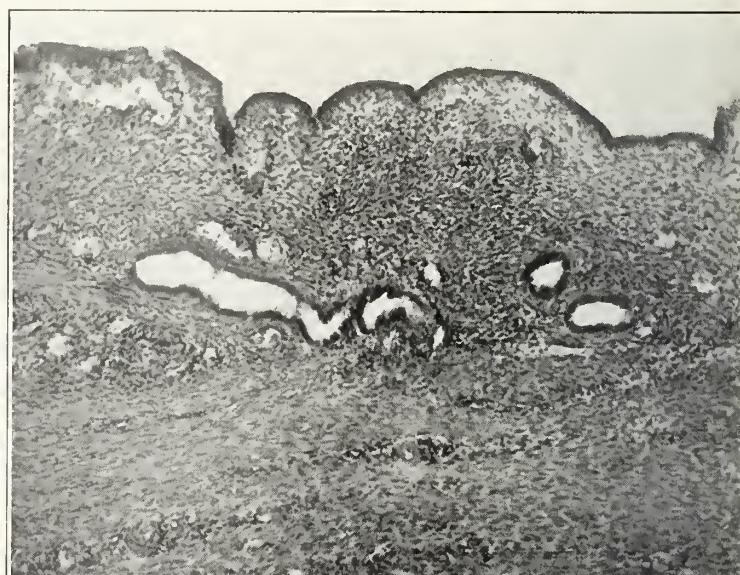


Fig. 6. Endometrium in the persistent late differentiative phase, which is identical with that seen in the last week of a normal cycle (x50).

ovarian failure or approaching menopause. This cystic degeneration or swiss-cheese appearance, which has so frequently been designated by others to denote hyperplasia indicates instead, we believe, a failing ovary.

The observations on proliferation and differentiation of the endometrium during the complete cycle strongly suggest that proliferation is dependent on the follicular hormone and that differentiation is under the control of the hormone of the corpus luteum. Cystic areas can always be detected when there is clinical evidence of ovarian failure. These areas are regularly seen in specimens removed from patients nearing the menopause or in the menopausal phase. That these changes are attributable to failure of the corpus luteum is substantiated by the consistent absence of corpus lutea in ovaries that are surgically removed during the menopausal phase. The endometrium in these cases is always thin; it is not hypertrophic and contains many cystic areas.

#### CLINICAL APPLICATION

Using the classification outlined by Herrell for the various phases of the normal menstrual cycle and observing the minor normal variations, the practical clinical applications of this work in the study of various types of menstrual disturbances may be stated. We believe that the histologic picture revealed in both cases of menorrhagia and amenorrhea can be easily classified and accurately interpreted in accordance with the basic principles previously outlined.

Patients presenting these various menstrual disturbances have been studied and specimens of endometrium for biopsy obtained. Microscopic examination of the endometrium has shown the regenerative process to be arrested in every phase of the cycle. The phase in which it has been checked depends on the activity of the follicle and corpus luteum. A study of the tissue furnishes presumptive evidence that the proliferative phase is under control of the follicle, and that the differentiative stage is under control of the corpus luteum. On this basis physiologic activity or failure can be definitely correlated with the histologic picture. The phases in which the histologic picture revealed the process to be arrested were designated as "persistent phases" of the cycle. Ovarian failure in degrees varying from partial to complete, is clearly expressed in the histologic appearance of the regenerating endometrium. With these facts definitely established, we can proceed with the clinical application.

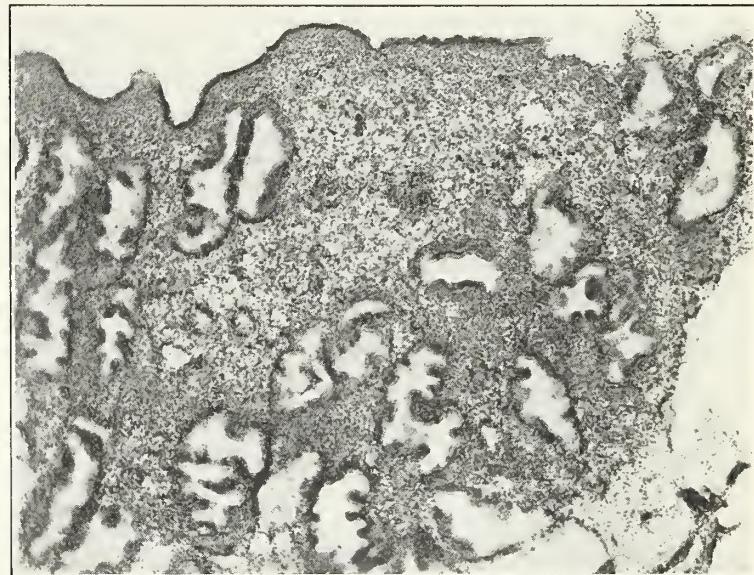


Fig. 7. Atrophic endometrium characteristic of true atrophy following the removal of both stimuli to regeneration, that is, follicular and corpus luteum hormones (x50).

#### REPORT OF CASES

*Case 1. Menorrhagia and metrorrhagia.*—A girl aged eighteen years had begun to menstruate at the age of eleven. The periods had always been irregular. Prior to her registration at the clinic, she had been menstruating continually for two and a half months. On examination she was found to be extremely obese and a marked secondary anemia was noted. The basal metabolic rate was —9 and —13 per cent on two different occasions. The pelvic organs seemed to be normal in size and position. A diagnosis was made of pituitary and ovarian dysfunction. Endometrial biopsy was made. Histologic examination of a section of endometrium in cross section revealed small tubular glands; this specimen was in every way identical with normal endometrium in the early proliferative phase (Fig. 2). However, this patient has persistent menorrhagia and metrorrhagia. It was obvious that the regenerative phase had been arrested in the early proliferative stage demonstrating a deficiency in both ovarian hormones and that the condition (persistent early proliferative phase), should be classified as partial ovarian failure on a hypopituitary-ovarian basis.

Low voltage roentgen ray therapy (five minutes exposure over the pituitary gland and ovaries) was administered and the periods have subsequently returned to a normal cycle.

*Case 2. Menorrhagia and metrorrhagia.*—A girl aged fifteen years had begun to menstruate at the age of eleven. Periods had always been irregular and occurred as often as every two weeks and as late as three months. She had been menstruating continuously for nine weeks prior to admission to the clinic. On examination marked secondary anemia was noted. The basal metabolic rate was

-23 and -19 per cent on two different occasions. The patient's weight was within normal limits, as contrasted with the previous case. There was no evidence of pituitary disturbance, but there was definite hypothyroid deficiency, without myxedema. A diagnosis of ovarian dysfunction was made, probably secondary to hypothyroidism. Endometrial biopsy was made to determine the degree of ovarian failure.

Histologic examination revealed small tubular glands in a cystic endometrium (Fig. 3). This cystic degeneration is indicative of prolonged deficiency in the activity of the corpus luteum, and the regenerative process has been arrested in the early proliferative phase. This picture is without doubt one of corpus luteum deficiency, since there is no differentiation and the stimulus for proliferation is insufficient to complete the proliferative phase; thus the regenerative process is arrested in the early proliferative phase.

Treatment consisted in administering desiccated thyroid tablets by mouth to establish a normal basal metabolic rate. The hormone of the corpus luteum was administered hypodermically before the expected period. The patient then experienced her first normal menstrual period, and subsequent periods in the next three months before dismissal were also normal.

*Case 3. Metrorrhagia and sterility.*—A woman aged thirty-eight years had been examined at the clinic on previous occasions for sterility. There was a history of neisserian infection, but pelvic examination did not confirm this. Tubal insufflation revealed the oviducts to be patent. At the time of the patient's last admission metrorrhagia had been present for eighteen months. General physical examination gave negative results. A specimen of endometrium was taken for biopsy and revealed regeneration to be arrested in the late proliferative phase (persistent late proliferative phase) (Fig. 4a).

The section is typical of this phase, that is, there are approximately six longitudinal glands per low power field, and these are somewhat dilated but straight. The histologic appearance of the endometrium presents nothing which would indicate deviation from normal, but from the history this endometrium must be designated a persistent proliferative endometrium. This is typical of a corpus luteum deficiency, that is, the stimulus for regeneration is present in sufficient amount to bring about complete proliferation; however, differentiation is lacking, and therefore, the corpus luteum is deficient.

This patient was given at various intervals an estrogenic hormone (theelin) over a period of four months and the bleeding was greatly increased. Antuitrin S was then administered, thirteen doses being given subcutaneously at intervals of a month, and the patient thereafter had a normal menstrual

period. She immediately became pregnant for the first time in twelve years, but had a spontaneous, complete miscarriage at about three and a half months. Periods again became normal and pregnancy occurred; but this ended in spontaneous abortion two months later. A second course of antuitrin S was administered for four days prior to the expected period during the next four months and thereafter, and a specimen of endometrium was taken for comparison. This section (Fig. 4b) reveals the late differentiative phase of normal endometrium, that is, the glands are now twisted on their longitudinal axes, producing the typical cork-screw appearance. The lumens of the glands are increased in size and the stroma appears somewhat compressed. The endometrium measures about 4 mm. thick. The section was taken on the twenty-fourth day of the cycle, so that the endometrium which had previously been arrested in the late proliferative phase has been corrected by substituting antuitrin S, completing the differentiation and is just prior to menstruation.

*Case 4.—Amenorrhea and molimina.*—A woman aged thirty years came to the clinic complaining of scanty menses and periods of amenorrhea lasting from three to six months over a period of two years. There was no evidence of pituitary or thyroid dysfunction. A specimen of endometrium obtained for biopsy three and a half months after the last period revealed the typical, early differentiative phase (Fig. 5).

There are six glands to the low power field, some increase in the height of the epithelium, and evidence of beginning convolution of the glands, all of which are characteristic features of this phase. The differentiation is therefore incomplete, resulting from insufficient stimulation of the corpus luteum. The molimina can be explained on this same basis. The scanty menstrual flow and the molimina were corrected by stimulation of the corpus luteum.

*Case 5. Periodic amenorrhea and molimina.*—A woman aged twenty-six years came to the clinic complaining of periods of amenorrhea lasting two to four months during the three years prior to her registration. General physical examination revealed nothing of note. The patient stated that during periods of amenorrhea she felt as though she would menstruate, but one to two periods would pass in this manner before she finally did menstruate. A specimen of endometrium for biopsy was taken three months after the last regular period. The section (Fig. 6) shows the typical late differentiative phase of the menstrual cycle. There are six to seven longitudinal glands per low power field; the glands are twisted on their longitudinal axes and the epithelium is of the tall columnar type, the nuclei being displaced toward the base of the cell. This, then, is the persistent late differ-

entiative phase. If these postulations are correct, then light ovarian stimulation should be sufficient to produce regular menses. This is exactly what happened in this case and the patient has remained normal.

#### ATROPHIC ENDOMETRIUM

Atrophy of the endometrium results from complete loss of ovarian function. The term is usually applied to the condition seen in menopausal and postmenopausal endometrium. True atrophy occurs following castration or radiation, since there is a complete loss of both the follicular and corpus luteum stimulus to endometrial regeneration. Figure 7 illustrates a section of uterus removed from a patient whose ovaries had been removed several years previously. The endometrium consists of a single layer of epithelium, overlying a loose stroma, and represents true atrophy of the endometrium. Curettage in these cases is scarcely productive of enough endometrium to make a diagnosis; however, the atrophy and the scattered clumps of epithelial cells in the stroma are diagnostic.

The gradual failure of the ovaries incident to the climacteric is usually associated with cystic degeneration in the proliferative phase. Activity of the corpus luteum probably ceases first for a varying period of time, thus resulting in cystic changes in contradistinction to the true atrophy that is seen following surgical removal.

#### SUMMARY

Menstruation is a continuous physiologic process consisting of loss of tissue, regeneration, and differentiation. Loss of tissue is complete in about twenty-four hours, and the following forty-eight hours are taken up with cell migration and reorganization. The next fourteen days consist of a process of proliferation, which we feel is under follicular control; the following fourteen days consist of a differentiative process, under the control

these changes are strikingly characteristic and are therefore easily identified.

By utilizing this classification of the normal regenerative cyclic process, we believe that the physiologic status of the ovary can be quite accurately estimated, and that therefore a more logical course of treatment can be given in cases of abnormal ovarian function.

Reports of clinical cases support this hypothesis.

## ENCEPHALITIS\*

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Unfortunately, in the past few years the term "encephalitis" has become a convenient "waste basket" for poorly defined and obscure brain conditions, many of which are of a non-inflammatory nature.

The word encephalitis presupposes an inflammatory disease of the brain. The question then arises, "What constitutes a cerebral inflammation?" Opie says, "Inflammation is a process by means of which cells and serum accumulate about an injurious substance and tend to remove or destroy it." In other words, inflammation is a defensive reaction on the part of the body tissues against noxious agents which seek to invade them. It should be understood that there is a difference between an inflammatory disease of the brain and an inflammatory reaction within the brain. All inflammatory diseases present an inflammatory reaction but all inflammatory reactions are not necessarily associated with inflammatory diseases. As we understand an inflammatory disease, it is the reaction of the cerebral tissues to some infectious agent and is characterized by the morphological triad of exudation, proliferation and alteration. While an inflammatory reaction may show these same morphological changes, yet it is localized and serves as a defense against a gross brain insult. It is well known that associated with brain tumor, hemorrhage, softening or local traumas, there is a reactive inflammation, perhaps pathologically indistinguishable from the inflammation of infection, yet the term encephalitis would hardly be appropriate for such conditions.

The brain parenchyma and, as is now believed, the neurogia as well, are of ectodermal origin, while the circulatory tree and its adventitial tissue is of mesodermal origin. In every disease of the brain both the ectodermal and mesodermal elements are involved in varying degrees.

When we consider the delicate mechanism of

TABLE I  
ANALYSIS OF 188 CASES IN WHICH A DIAGNOSIS OF  
HYPERTROPHIED ENDOMETRIUM WAS MADE

Phase	Days	Cases	Glands per low power field	Average thickness, mm.
Early proliferation...	1 to 7	24	3	1+
Late proliferation...	8 to 14	34	6	2.5
Early differentiation	15 to 21	34	6 to 7	3.5
Late differentiation	22 to 28	60	6 to 7	4.0
Total.....		152		

Menopausal and postmenopausal: 36 cases

of the corpus luteum. Both the proliferative and differentiative processes are divided into an early and late phase, each of which reveals definite changes in the glands, epithelium, and stroma;

\* Presented before the Section on Medicine of the Indiana State Medical Association at the Gary session, October 9, 1935.

the cerebral structures, it seems remarkable that the brain is not more often involved in general infectious diseases, but as a matter of fact, the brain is perhaps the most invulnerable of the body structures. In the first place, it is encased in a bony cage which protects it from invasion by continuity of structure, unless this bony cage becomes damaged. Around the smaller blood vessels is found a membrane peculiar to the brain, known as the glial limiting membrane which, together with the peri-vascular structures, offers an efficient barrier to blood stream infection.

It is amply proved that the neural sheath and the axis cylinders themselves transmit toxic material from the periphery to the nerve centers, and it is now generally conceded that the infectious agent in many brain inflammations gains entrance to the cerebral tissues by these routes, perhaps most often by way of the olfactory nerve. The avenue of infection, therefore, may be regarded as haemic, by way of the blood stream, or neural, by way of the nerve sheath and axis cylinder, but probably more often the latter.

In certain instances these inflammatory brain diseases involve primarily the parenchymatous structures, constituting what will be referred to as essential encephalitis, with the assumption that they are produced by specific neural toxins.

In other instances, the vascular system bears the brunt of the infection, the pathological changes being found principally in the smaller vessels with capillary dilatation and stasis, thrombotic foci and hemorrhagic infiltration, the ectodermal or parenchymatous elements of the brain suffering only secondarily through nutritional disturbances. These inflammatory vascular diseases of the brain are often referred to as toxic or hemorrhagic encephalitis but, with a strict understanding of the term, this is erroneous, as they are not true inflammatory diseases of the ectodermal structures. Spatz has used the term "pseudo-encephalitis" to distinguish these and similar conditions from the essential parenchymatous brain infections. In this group of vascular inflammations of the brain would be properly placed the encephalopathies associated with alcohol, lead, and other chemical or metallic poisons, and the so-called toxic encephalitis associated with bacterial products derived from some distant point of infection, or toxins produced by metabolic or chemical disturbances within the body.

While the pathological picture in this group of encephalopathies is different from that seen in essential encephalitis with primary inflammation of the ectodermal structures, yet the clinical manifestations are often similar and differentiation is difficult or impossible. This group of encephalopathies or "pseudo-encephalitis" is extensive and constitutes a large number of cases seen in neuro-

logical practice; perhaps the greatest number are those presumably the result of bacterial toxins, varying in severity from mild evanescent cerebral disturbances to profound fulminating conditions in which death occurs before definite inflammatory changes can be demonstrated in the brain structures.

Another group of brain conditions which are not of an inflammatory nature, but which often are referred to as encephalitis, are the active and passive edemas, analogous to the condition spoken of as meningismus, so frequently seen associated with severe infectious diseases. With our present knowledge of the vasomotor supply of the cerebral vessels, it is easy to understand how localized or general edemas may occur within the brain as the result of some toxic material in the blood stream. No doubt some of these cases are mild abortive brain infections of either the vascular or parenchymatous type, or, on the other hand, there may be an acute fulminating encephalitis such as is seen in the so-called acute serous encephalitis described by Brown and Symmer, in which death occurs before the products of inflammation are present.

With the elimination of the conditions above mentioned, that is, reactive inflammation, inflammatory disease of the cerebral vessels and the so-called brain edemas, the term encephalitis narrows down to those conditions in which the inflammatory changes are found primarily in parenchymatous or ectodermal structures of the brain. These diseases are presumably the result of specific neural toxins, whether of virus or bacterial origin is still debatable. Notwithstanding the exhaustive work of Rosenow and his associates on the bacterial origin of encephalitis and the association of the "green streptococcus" with this disease, the consensus seems to be that a virus is the causative factor. It is again a question as to whether there are different strains of virus which explain the various histological and clinical manifestations of encephalitis or whether all types of encephalitis may not be produced by variants of the same virus or the same virus influenced by extraneous factors.

As stated previously, the avenue of infection may be by way of the blood stream, the axis cylinder or neural sheath. It is generally believed, however, that the usual port of entry is by the latter route, along the sheath or axis cylinders of the cranial nerves. Once the virus has entered the central nervous system, it rapidly disseminates itself to various parts of the brain by direct extension, by way of the spinal fluid or along the course of the axis cylinders, apparently showing a selective affinity for certain histological structures.

It is inconceivable to think of one part of the

brain, its vascular system or meninges as being exclusively involved in an inflammatory process. In brain infections certainly all parts and structures of the brain are more or less affected, but it seems that certain types of encephalitis show a peculiar affinity for certain histological structures of the brain tissue. The gray matter may be predominately involved, producing a polio-encephalitis, at other times the white matter, a myelo-encephalitis, and in still other instances, both the gray and the white matter about equally, together with extensive meningeal involvement giving rise to what is generally referred to as meningo-encephalitis.

In the polio-encephalitic group are found such human diseases as rabies, epidemic encephalitis of Von Economo, and acute anterior poliomyelitis; in the second group, the myelo-encephalitides, are such conditions as acute multiple sclerosis, Schilder's Disease, and acute disseminating myelo-encephalitis; the third group, that is, the mixed meningeal type, often complicate such infections as vaccinia, smallpox, measles, and mumps, and here perhaps belongs the so-called encephalitis "B" of the Japanese.

The question is often asked: "Is encephalitis a new disease, an old disease with a new name, or an old disease which has recently enjoyed a youthful recrudescence?" Probably the last is correct. It is reasonable to suppose that cases of so-called juvenile Parkinson's Disease were in reality chronic epidemic encephalitis and many of the brain fevers of a generation ago were encephalitis of the "B" type. It is doubtful, however, if disease ever assumed severe epidemic proportions in civilized countries until within the past twenty years.

Efforts to classify the primary encephalitides have been generally unsatisfactory, the doubtful etiological factors, and variability in the pathological findings, and erratic clinical manifestations, all offer serious obstacles to an accurate classification. Perhaps for the present, the best conception of the disease is to regard it as a condition in which there is a primary parenchymatous inflammation of the brain produced by some specific neural toxin or toxins, an endemic disease at times assuming epidemic proportions.

While encephalitis has been described in the text books for many years, yet the first great interest in the disease was stimulated after Von Economo's report in 1917 on a peculiar disease appearing among Austrian soldiers. The same disease had been observed on the Western Front a year or two earlier, and had been reported by Cruchet even before Von Economo's paper. This disease was called by Economo lethargic encephalitis, as lethargy and stupor were prominent symptoms. For the next few years the disease was pandemic in American and European countries, the clinical manifestations being those of lethargy and drowsi-

ness often varying with profound insomnia and delirium, cranial nerve involvement, mild meningeal symptoms, increase in the spinal fluid pressure and cellular elements with a low grade fever; it was also noted that a large percentage of the cases were associated with or followed by extensive involvement of the extra-pyramidal system, as was evidenced by muscular rigidity, poverty of motion, tremors, and often athetoid movements, constituting the so-called Parkinsonian syndrome, but showing a much more widespread involvement of the extra-pyramidal system than is seen in the ordinary senile types of paralysis agitans. In the past few years, the clinical lethargic encephalitis as described by Economo has become increasingly rare.

In 1924 an epidemic of encephalitis was reported in Japan. This was not a new experience, as similar epidemics had been reported as far back as 1871. While this was recognized as a true brain inflammation, yet it did not correspond to the classical disease of Economo and was consequently given the name of encephalitis "B." In the past five years epidemics of greater or less magnitude have been reported from various communities, probably the largest of which was in St. Louis in 1933. The whole pathological and clinical picture of these (St. Louis) cases is certainly different from the early cases of lethargic encephalitis. The average case was more acute and fulminating, running a rather violent course, with evidence of widespread brain and meningeal involvement, usually terminating in death or complete recovery without sequelae, whereas a great majority of the early cases developed the Parkinsonian syndrome. The entity reported by Economo usually appeared in young people, the time of epidemic being in the cold months, and often there was a definite association with influenza or some other respiratory infection, while the recent epidemic cases were more frequent among elderly people, in whom it was particularly fatal, and it seemed to assume its greatest epidemic proportions in summer weather. It is a debatable question as to whether or not these later cases seen in this country are the same as those described by the Japanese and labeled encephalitis "B."

While at this time encephalitis is not an epidemic disease, yet it is endemic and sporadic cases are constantly being seen. As stated above, they are not ordinarily of the Economo type but correspond more to the picture seen in the later epidemics or to the demyelinizing types described under the terms of acute multiple sclerosis, or acute disseminating myelo-encephalitis.

The question is often asked, are other epidemics of encephalitis probable? Undoubtedly they are. Apparently, the infectious agent, whether bacterial or virus, is constantly present and at times, due either to increased virulence of the causative

agent or favorable conditions for infection, the disease becomes epidemic. Until the causative agents are known, efforts at control in the way of quarantine and prophylactic vaccination as well as establishment of a rational treatment will be of little avail.

Despite the fact that various sera and vaccines have been used, the treatment of encephalitis is still largely symptomatic, with efforts directed to reduce increased intracranial pressure, maintenance of nutrition, and proper elimination. Various drugs have been used to combat the infectious element, but evidently none are specific. Of these agents I have been impressed with the favorable results following the intravenous use of urotropin. Whether it acts as a specific antitoxin, stimulates the blood and body tissues to greater phagocytic activity, or whether my experiences have been mere coincidences, I do not know.

This short discussion has been an attempt to show that encephalitis is a disease entity, not a "dumping ground" for poorly defined and obscure brain conditions. Notwithstanding the immense amount of research work done in the past few years, comparatively little is known of this disease except that its two close associates are death and invalidism.

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#### DISCUSSION

P. S. JOHNSON, M.D. (Richmond): I had no copy of Dr. Carter's paper; consequently, I have listened to it just as you have. Dr. Carter and I, from time to time, have talked over this subject, and we found no great differences in our views regarding encephalitis. However, I noted in one of the closing statements in his paper that he referred to encephalitis as a definite disease entity, and I wish to present certain reasons for doubting that assumption.

If you will consult the files of your *Journal of the American Medical Association* for the past two or three years, the following kinds of encephalitis will be found listed: Arsphenamin, lead, influenzal, hemorrhagic, rheumatic, rubellar, post-vaccinal, traumatic, and allergic. This list is by no means complete. I think most of those present could add one or more to the kinds mentioned. But none of these come within the scope of Dr. Carter's paper; he definitely excluded them.

During military service I chanced to be in a base hospital, caring for infectious and contagious diseases, and while there I observed the development of encephalitis in seven patients recovering from mumps.

These patients were transferred to a base hospital caring for patients with nervous and mental diseases. Some weeks later I was transferred to this hospital and placed in charge of the "encepha-

litis ward." I found these patients classified as cases of epidemic encephalitis. Twenty-one other patients were similarly classified, many of whom had a history of antecedent infection or serious trauma. Certain events passing before me in the next few years, together with this observation, caused me to doubt whether encephalitis as we see it clinically, constituted a definite disease entity. Then came the work of Rosenow and his development of his antistreptococcal serum. This serum seemed well established in its specificity and I began to regard the syndrome as a definite clinical entity. Next came the 1933 epidemic in St. Louis. I presume that no epidemic in the history of medicine ever received the careful study that was given in this instance. I am sure we all watched with great interest the reports of findings in that epidemic. Without prejudice I shall quote briefly from the reports of the various investigators. No attempt will be made to credit them to the particular individual making them.

First, "the incubation period ranged from nine to fourteen days, and possibly from four to twenty-one days."

Second, "there has been a notable freedom from multiple cases in the same family, and from obvious contagion between cases."

Third, "In many households the least mobile member, the one least in contact with the outside world, was the one stricken."

Fourth, "the spread of the disease was noteworthy, its spread being disproportionate to the number of cases. . . . The figures as to incidence, fatality and age were striking. . . . Between communities the spread was by human contagion, and the part played by age seemed more important than contagion."

Finally, regarding the antistreptococcal serum of Rosenow, "I object to calling it specific . . . the only lesion caused by these strains in experimental animals was meningitis."

From all the comments I could find, the one best calculated to support the assumption of a definite entity appear in the summary to an article on the etiology of this epidemic and is here quoted: "This virus acts on monkeys and white mice and is distinct from other previously known viruses. The number of strains of similar characteristics isolated, and the neutralization of virus by serum of individuals convalescent from encephalitis in this epidemic, but not by the serum of individuals recovered from other diseases, justify the conclusion that it is the etiologic agent of the recent epidemic."

In view of these observations from widely scattered sources, I do not think it an impertinence to raise the question as to whether encephalitis is a definite clinical entity.

## CATARACT FORMATION OCCURRING FOLLOWING THE USE OF DINITROPHENOL

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MUNCIE

CASE REPORT

This is a case report of rapid cataract formation occurring in a relatively young individual, who had been using dinitrophenol therapy for the treatment of obesity.

Mrs. C. S., age 36, sought advice April 22, 1935, concerning a blurring of vision of seven to ten days duration. Her history prior to the events surrounding her present condition is generally irrelevant. She had the usual childhood diseases followed by normally good health, with the exception of an attack of acute appendicitis three years ago, for which an appendectomy was performed.

She was married at the age of 22, at which time her weight was 125 pounds. She retained this weight until a normal pregnancy in 1926, after which her weight increased to 130 pounds. She retained this weight for the following three years, after which time it began to increase and continued to do so until in 1934. On March 5, 1934, she consulted her physician regarding weight reduction. From his records it is indicated that her weight was 177½ pounds; heart rate 86 and blood pressure 160/100. The physical examination did not disclose any other points of interest. From March 5 until May 10 she was administered a total of 202 grains of dinitrophenol, given in accordance with the recommended dosage. During that time she elicited no discomfort and none of the side reactions that frequently accompany the use of dinitrophenol. On May 10, 1934, her weight was 147½ pounds, a loss of 30 pounds; the blood pressure was 135/90; and heart rate was 76. She emphasized her general feeling of well being. Treatment was discontinued at this time because of a second pregnancy. This pregnancy was uneventful and she was confined January 27, 1935. Two weeks following her confinement, she developed a rather severe attack of influenza. It is also noteworthy that about this time her husband developed a ruptured appendix and died two weeks later of peritonitis. Immediately following this shock, she suffered a relapse and was ill for two weeks. On March 19, 1935, she again consulted her physician regarding the administration of more dinitrophenol. At this time, her weight was 174 pounds; blood pressure 164/100, and heart rate 84. Her physician very cautiously administered to her one-half grain of the drug daily for ten days, then one-half grain two times daily for seven days and finally one-half grain three times daily for seven days, making a total of 21 grains. At this time she complained of haziness of vision and the drug was discontinued. It was seven to ten days later that she sought advice from an

ophthalmologist. She did not disclose the fact that she had been taking dinitrophenol. On that date vision in the right eye was 20/50 and in the left eye 20/70. Ophthalmoscopic examination disclosed normal anterior chambers. Each lens contained numerous small, round, whitish opacities, distributed generally throughout the anterior cortex. Blood chemistry, blood serology and urine studies were made and all reported negative. Her vision progressively decreased and by May 13, 1935, there was a fairly mature cataract formed in the left eye, and by June 1, 1935, a similar condition in the right eye.

### COMMENT

In the way of comment, there elapsed only the short interval of time of approximately seven to eight weeks from the subjective onset of this patient's cataract formation to the production of blindness. Also, there was an interval of almost a year between her intake of dinitrophenol in any appreciable quantity and the onset of her symptoms. We unfortunately did not learn of her use of the drug until after her cataracts were removed.

If the dinitrophenol was the causative factor in her misfortune, the question arises: Had the process started several months ago, or had her previous use of it set up an idiosyncrasy that permitted a very small dosage a year later to excite a dormant process into activity? Also, is it the toxicity of the drug, or is it the change in lens condition brought about secondarily from the effect of the drug? Unquestionably, the incident of cataract formation occurring in people who have been using dinitrophenol has been sufficiently prevalent to make the question worthy of definite mention.

### DISCUSSION

C. W. RUTHERFORD, M.D. (Indianapolis): Dr. Hill has the distinction of being the first Indiana physician to record a case of this kind, and in the absence of evidence to the contrary, he is the first in this state to observe and study such a case. He is to be congratulated on his excellent presentation of this unusual and interesting case history. The report is significant because the case was studied and carried through to successful operation on each eye before any mention of a relationship between dinitrophenol and cataract had appeared in the literature.

Dinitrophenol has recently come into use in the treatment of obesity. The reduction in weight is due to its ability to accelerate the rate of metabolism. Poisoning has occurred in many instances, with fatal results in some. Cataract has been found in several patients during or following treatment by this agent. These misfortunes merit investigation.

A review of published cases shows that one man aged 38 and fourteen women aged from 25 to 50 with an average age of 40 years developed cata-

racts; during the decades involved the endocrine functions are sensitive to disturbing factors, yet no case history has mentioned the type of obesity, its cause, or its endocrine relations. Malnutrition and unbalanced diets have no known effects in these cases. Dinitrophenol is eliminated very rapidly and has no cumulative result; it is prepared by reliable chemists and so impurities need not be suspected.

The most important factor is individual sensitivity, susceptibility or idiosyncracy to the drug. It induces some peculiar consequences. Liver glycogen is depleted, and an adequate store of liver glycogen is required for protection against toxins. Muscle glycogen disappears. Carbohydrate storage is impaired with resulting fatigue of early onset and profound effect. Concentrations of sugar and lactates in the blood and of lactates in the muscles are increased. There is a loss of dextrose tolerance. Probably insulin production is impaired. There is no glycosuria unless the patient is diabetic. The contraindications for dinitrophenol include alcoholism, diabetes, nephritis, and diseases of the heart and of the liver.

Deaths have occurred where the dosage was excessive or where the drug was continued after the appearance of warning complications. Rigor mortis was observed very soon after death. Necropsic examinations have revealed evidences of toxicity in the liver, heart and muscles and degenerative changes in the kidneys.

Dr. R. N. Harger of the Indiana University School of Medicine tested dinitrophenol on dogs. When administered in alcoholic intoxication the recovery period was about half that when the drug was not used. With large doses the basal metabolic rate in some instances exceeded plus one hundred per cent. With very large doses symptoms of profound heat stroke were produced and the temperatures rose above the upper limits of the clinical thermometer in four animals, three of which died; pronounced body rigidity was present even before death.

The use of dinitrophenol is the only factor that was common to all the reported cases of cataract formation. Decrease in central visual acuity occurred in some cases while the patient was taking the drug and in others as long as nine months after the drug was discontinued. It is possible that undetected lens changes may have been present before treatment was begun. Cataracts have appeared both with and without other special or general harmful effects being observed.

Descriptions of affected lens are comparable to the classical descriptions of complicated cataracts; that is, those due to trauma or to exogenous influences in the course of such diseases as diabetes, parathyroid tetany, and myasthenia gravis. The anterior capsule has been described as spotty, pebble-like, dry or lustreless, and the posterior capsule as similarly affected. Subcapsular opacities are described as fine, gray, cloudy, powdery, or

like brass filings. The cortex contains irregular, pearl gray, and other opacities. Cholesterin-like crystals have been seen. A saucer or shell-shaped posterior cortical opacity was frequently observed. The posterior lens reflex is described as silvery, bronze-like, or brilliantly metallic. Intumescence is accompanied by increased intraocular tension.

The vagaries of refractive changes are perplexing unless one keeps in mind the varying blood sugar status.

The toxicity of the drug for susceptible persons is made dramatically evident by the appearance of a pruritic dermatitis, loss of taste or smell, sensory disturbances, peripheral neuritis and gastrointestinal upsets. Such phenomena suggest that the toxic process involves structures that are derived from surface ectoderm.

The early changes in the lens occur in the capsule or immediate subcapsular zones. Cogan and Cogan<sup>1</sup> suggest "that the cataracts are the result of damage to the lens epithelium rather than to primary precipitation of lens constituents." These reporters obtained immature cataractic lenses which had been removed by intracapsular technique and immersed them in two per cent solutions of dinitrophenol; no further opacification was observed. This experiment supports their theory of initial epithelial damage.

A summary includes a series of observations that have a more or less logical sequence: dinitrophenol accelerates the basal metabolic rate, it is capable of producing profound damage in essential organs and physiologic processes, it is the one common factor in the published reports of cases in which cataracts developed, and it affects structures that are derived from surface ectoderm; the epithelium of the lens appears to be the part first affected and the cataract is of the complicated variety.

The presumptive conclusions are that dinitrophenol is toxic for susceptible individuals only and that their cataracts are the consequences of injury to the lens epithelium.

W. F. HUGHES, M.D. (Indianapolis): We have seen three cases that were in a certain way related to this poisoning.

The first was a fairly well-developed cortical cataract in an individual about fifty years of age who had taken dinitrophenol about three months previously for a considerable period of time. Whether this was a case like Dr. Hill's, I do not know. She may have had the cataract before she took the drug.

The second case had a very peculiar appearing opacity in the lens. It reminded me of serpigenous ulcer of the cornea—a branching, thread-like affair; the same kind of opacity was present in each eye. In this case, the vision was reduced to 20/40 and 20/50. I saw the case about three weeks later, and it seemed to me that the threads were increasing in width. This patient was a nurse who had

<sup>1</sup> Jour. Amer. Med. Assoc., 105:793, Sept. 7, 1935.

been taking a considerable quantity of the drug for a period of time, and recently stopped when she noticed the blurred vision and saw reports on the subject.

The third case was one in which the patient was taking the drug in question under the direction of a general physician for the purpose of reducing weight, and she noticed a slight blurring in vision. Examination showed normal vision in one eye and 20/30 in the other. In this particular case, I thought the eye with normal vision revealed some opacities in the lens, but in the eye with 20/30 vision, the opacity could be seen very definitely with the ophthalmoscope.

D. H. Row, M.D. (Indianapolis): It is possible that I have seen some of the cases of which Dr. Hughes has spoken, although from his description of them, I think not.

In the first case that I saw, the woman was 41 years of age. She had not taken dinitrophenol for more than a year. Changes both ophthalmoscopically and with the slit lamp appeared in the posterior cortex of the central area. There was a rather coppery reflex from the opacities.

The other woman was twenty-nine years of age, and she had similar changes—in the posterior cortex, most apparent. She had not taken any dinitrophenol for more than a year. In both cases, the anterior chambers were quite shallow. I believe, as I recall reported cases in the literature, there was a complication of secondary glaucoma in several cases, probably due to the intumescence of the crystalline lens. I consider that to be one of the most important complications for us to anticipate. The potentiality of glaucoma damage in these cases might go to extremes and make later cataract extraction unavailing.

JOEL WHITAKER, M.D. (Indianapolis): I have seen three of these cases—one described by Dr. Hughes. The other two had cataracts which I removed.

The first came on June 17, and had 20/20 vision in one eye and 20/30 in the other. She gave a history of having taken nine grains from June, 1934, to January, 1935, and none since. She had vision of 20/20 and 20/30 plus; by August 8, vision dropped to 20/40 O. D. When I first saw her in June, she had some central lens opacity.

The second patient came on June 27. She had at that time 20/30 plus O. D. She had taken thirteen one-half grains per day of dinitrophenol from June, 1934, to January and three grains a day from January to June. This woman on August 8 had approximately 20/40 vision in both eyes. Soon she reached the point where she could count fingers only. On September 9, the first woman, who had taken the drug from June to January and none since, could count fingers with one eye and had 20/40 vision in the other. On September 19 she could count fingers at ten inches with each eye. She said that on August 28 the vision failed rapidly and in three days time she could count fingers.

Five days prior to her last visit, she could read without glasses at twenty inches. The day before (that is four days later) she could read the newspaper at three inches, and the next day she could not read at all.

I removed one cataract for each patient on September 23, the second for each patient September 30.

I talked to Dr. Harry Gradle on the telephone early in August, when the second patient's vision had dropped to 20/40; about the advisability of operating them. I expressed the opinion that I should wait as there was a possibility of other degenerative changes in the eyes and he agreed with me.

In the first eye operated, which had the cataract of longest standing, the capsule broke at the slightest touch, the cataract ran into the eye like buttermilk; the other eye was exceedingly soft and had to spoon it out. The second patient's cataract came out much more easily and readily. I, therefore, believe that these cataracts should be removed as soon as they cause industrial blindness.

The first patient, who had used the drug from June to January and none since, had fifteen electric sweat baths in July and August and she noticed the same peculiar odor in the perspiration that she noticed when she first took the drug. With the last three baths, she noticed no disagreeable odor from the perspiration. I, therefore, think the drug is accumulative. I think these cataracts should be removed as soon as industrial blindness comes; they have to be taken away, and it is much easier to do it early.

Dionin had no effect in retarding the cataract. Dr. Gradle said that he operated one under similar circumstances and had to do a linear extraction and that the lens substance was soft.

M. S. HARDING, M.D. (Indianapolis): It was my privilege to assist Dr. Larkin in operating the case described by Dr. Hill. In the second eye we were having secondary glaucoma, which was relieved when the cataract was operated. The lens contents were easily removed by linear extraction.

A young nurse had taken the drug from March to June, 1934. Lenticular changes were marked in July of 1935. Incidentally, there was no reduction in weight.

These cases were advanced and practically the entire lens was clouded and symptoms of secondary glaucoma were present.

DR. HOWARD HILL (closing): No one seems prepared to say now just what causes these cataracts. This is the sixty-eighth case we had treated with dinitrophenol, having kept very careful records, and with the sixty-eighth case came cataract. Possibly we will have the opportunity to see more of these cataracts within the next few months. It is not reasonable for any ophthalmologist, in the light of present knowledge regarding it, to assert that dinitrophenol, to the exclusion of all other factors, is responsible for these cataracts.

## OSTEOTOMY AND ARTHROPLASTY FOR BONY ANKYLOSIS OF THE LEFT TEMPORO-MANDIBULAR JOINT OF TWENTY YEARS DURATION

FREDERICK A. LOOP, M.D.

LAFAYETTE

### HISTORY

The patient is a white woman, twenty-four years of age, whose chief complaint was inability to open her mouth. She stated that this condition was first noted by her family when she was about two years old. At the age of one year she had an ear infection associated with prolonged otorrhea, but she does not know which ear was affected. Other than this infection the patient denied having had any pain in the region of either temporo-mandibular joint which might have been due to injury or infection. She felt that she could detect slight motion in the region of the left temporo-mandibular joint but her mouth has always been closed.

The presence of teeth prevented the ingestion of solid food until the incisors became carious and crumbled. This provided an opening, and since that time the patient apparently has been able to eat almost everything, using the tongue for mastication. When first seen she was of small stature but well developed and well nourished.

A tumor of the right eye has been present since birth and has been slowly increasing in size.

The remainder of the history is irrelevant.

### EXAMINATION

Examination revealed a young adult white woman whose face was markedly asymmetrical. (Figure 1.) The lower portion of the right side of the face was flattened and the receding chin deviated to the left. The left angle of the mandible was more prominent than the right.

The external appearance of both temporal regions was normal, but the patient was unable to separate her jaws even perceptibly. No evidence of motion could be detected by palpation over either joint when the patient attempted to open her mouth. Marked oral sepsis, dental caries, and malocclusion were present.

Roentgenological studies of the temporo-mandibular joints revealed what was apparently a normal joint on the right although the coronoid process seemed to be absent. There was no evidence of a joint on the left side. (Figure 2.)

The diagnosis of ankylosis of the left temporo-mandibular joint was made and surgical mobilization advised.

### OPERATION

The operation was performed on December 7, 1933. Under local anesthesia, the site of the left temporo-mandibular joint was exposed through an angular incision. Dissection was carried down to bone and a skin flap was reflected downward along with the upper portion of the parotid gland. Careful exploration of the bony surface in all directions revealed no evidence of a joint. A very small prominence represented the tubercle of the zygomatic process of the temporal bone, and just posterior to this point the temporal bone was fused and continuous with the coronoid process and the condyle of the mandible. The glenoid fossa and sigmoid notch had been completely obliterated. It was impossible to determine whether this was due to congenital absence of the joint or to a complete bony ankylosis of a joint once present.

An osteotomy was performed through the uppermost portion of the body of the mandible and about half an inch of bone was removed. The mandible was about an inch wide and three-quarters of an inch thick at this point. As soon as the last fragment of bone had been severed, the patient stated that her jaw was movable. The cut ends were trimmed and the wound was closed in layers.

Cleansing of the oral cavity was begun at once and the mouth was wedged open several times daily beginning on the third post-operative day. The only complication was a moderate amount of edema about the left eye which disappeared promptly.

When discharged on the eighth post-operative day, the wound was well healed and the teeth could be separated about half an inch. At that time the limitation of motion seemed to be due to soreness in the right temporo-mandibular joint; this responded to infra-red heat.

Active motion was continued and correction of dental defects instituted. The patient was in-



Fig. 1. Before operation.

structed to manipulate the jaws forcibly herself several times daily and her family physician kindly consented to wedge the jaws apart with tongue depressors daily.

While undergoing treatment elsewhere for the eye tumor, the patient was unable to carry out the above measures or to visit the author for a short period of time. When next seen, on April 5, 1934, the range of voluntary motion had decreased and it was felt advisable to institute forcible manipulation under anesthesia. This was done about once a month with improvement at first, but at the end of six months the voluntary range of motion was still unsatisfactory in spite of vigorous efforts by the patient between manipulations.

Röntgenograms of both temporo-mandibular joints taken in November, 1934, showed no change in appearance of the right and practically no evidence of the osteotomy on the left.

Believing the left side to be responsible for the limitation of motion, the site of the osteotomy was explored by a similar exposure on December 13, 1934, and almost complete bony union was found. The body of the mandible was divided at the same point and the ends fashioned with a chisel to form opposing rocker surfaces. A rather large flap of fascia and fat was then formed by sharp dissection and secured between the cut surfaces. A small rubber tissue drain was inserted and the wound closed. The range of motion was greatly increased at once. The drain was removed in twenty-four hours and convalescence was uneventful. When the soreness had disappeared, an excellent range of voluntary motion was present.



Fig. 2. Röntgenogram of left temporo-mandibular region.



Fig. 3. Four months after arthroplasty of left temporo-mandibular joint. (a) mouth closed; (b) mouth open.

Because of the marked dental caries and oral sepsis, all teeth had been extracted before the arthroplasty was done. It was then possible to provide both upper and lower dentures. The appearance of this patient was entirely changed by teeth and dentures molded to lessen the facial asymmetry. (Figure 3-a.)

When last seen, October 19, 1935, the patient was able to move her jaw freely with a maximum distance of about two centimeters between the teeth. (Figure 3-b.) Apparently there has been little difficulty in the chewing of food in spite of the many years of disuse of the muscles of mastication and the right temporo-mandibular joint.

#### ETIOLOGY

"The most frequent causes of ankylosis of the mandible are trauma and infectious arthritis. Even the ankylosis which is seen in early infancy, sometimes designated as congenital, is often the result of birth trauma. Of the infectious forms of arthritis, the most common are those due to osteomyelitis, scarlet-fever, diphtheria, typhoid fever, gonorrhea and the infections reaching the mandible from the middle ear, teeth and tonsils."<sup>1</sup> "It may be a part of a generalized osteo-arthritis. Bony union of the joint surfaces and surrounding parts may also occur, especially in children, after severe traumatism in which the main part of the force is received in the region of the condyle."<sup>2</sup> In an analysis of 212 cases taken from the literature, Blair<sup>3</sup> found that trauma was the most common single cause, accounting for fifty per cent of all cases, and that the most common form of injury was a blow or fall on the chin.

#### PATHOLOGY

In intra-articular ankylosis there is a fibrous or bony fusion of the condyle and the glenoid fossa.

<sup>1</sup> Putti, Vittorio; Arthroplasty. Nelson's Loose-Leaf Living Surgery, Vol. III, pp. 457 N-457 S.

<sup>2</sup> Ivy, Robert H.; Surgery of the Mouth and Jaws. Nelson's Loose-Leaf Living Surgery, Vol. II, pp. 670-673.

<sup>3</sup> Blair, V. P.; Operative Treatment of Ankylosis of the Mandible. *Surg., Gynec. and Obstet.*, Vol. 19, p. 436, 1914.

Blair<sup>3</sup> infers from his analysis that bony ankylosis is the most common form. When caused by pyogenic infection, Campbell<sup>4</sup> states that "The structure is changed by the extensive osteo-myelitis into dense, eburnated bone, and the affected portion of the mandible becomes massive and hypertrophic, often two or three times the normal size. The joint space is obliterated and the bony structure of the condyle may be continuous with that of the temporal bone."

If ankylosis occurs during childhood, the development of the mandible on the affected side is impaired since increase of the ascending ramus of the mandible is largely dependent upon the epiphysis of the condyle. Fixation of this and the consequent loss of function causes underdevelopment and shortening of the affected side and results in a typical deformity, the so-called "bird face."<sup>1 2 3 5</sup> Dorrance<sup>6</sup> states that in all cases of bony ankylosis for any length of time a muscular atrophy is produced from disuse with an invasion of fibrous tissue into the muscle; the fascial layers are foreshortened or have not stretched, as they should have in the growth of a normal individual.

#### OCCURRENCE

The causative process usually occurs during the first decade but most of the cases are not treated until between the ages of twenty-one and thirty. Instances outside the above age periods are not rare, however.<sup>3 5</sup>

#### CLINICAL PICTURE

If ankylosis has developed after full growth of the jaw, visible deformity is usually absent.

If ankylosis has occurred during childhood, the face is quite symmetrical when bilateral, but if unilateral, the chin deviates toward the affected side and is markedly retracted. Some mobility is usually present even in bony ankylosis, and when movement is attempted the chin moves toward the unaffected side. In unilateral ankylosis, the normal side of the face is flattened while the other appears full and rounded. Roentgenograms show a shortening of the ascending ramus of the mandible on the affected side and it may be impossible to demonstrate the temporo-mandibular joint, as in the case reported.

Extra-articular ankylosis is usually apparent upon examination from the presence of cicatricial bands in the cheek or between the dental arches and a greater range of motion. The nature and location of the initial process should be taken into consideration in the differentiation of this form of ankylosis.

In spite of the difficulty in taking food, the subjects of this condition are generally well nourished and suffer only extensive dental caries from the lack of oral hygiene.

#### TREATMENT

Operative procedures are recognized as the only adequate form of treatment. Osteotomy or excision of the temporo-mandibular joint is the basic principle of the advised methods, plus the formation of a new joint. Various authors are not in accord in regard to the interposition of material between the denuded bone ends, but all agree that foreign materials should not be used. Soft tissue flaps of fascia, muscle and fat have been introduced but it is felt that the use of such tissue, pedunculated or free, is not essential to the success of the procedure. A large quantity of bone must be removed whether done through the condyloid process or through the upper end of the ascending ramus, should the coronoid process be involved in the bony fusion.

"There are no contraindications to arthroplasty of the jaw. The disability is so great, so distressing and embarrassing and the results so uniformly successful that mobilizing operations should be performed in all cases."<sup>4</sup>

The causes of recurrences are classified in three groups by Dorrance:<sup>6</sup> (1) Operation performed while an active arthritis is still present; (2) incomplete operation; and (3) failure to use any or an adequate form of exerciser post-operatively. The recovery of motion and freedom of action is greatly increased by the use of some form of exerciser to redevelop the muscles and stretch the fibrous tissues.

300 Main St.

DUES PAID?

DELINQUENCY  
BEGINS FEBRUARY  
FIRST.

IT PAYS TO BE  
A "MEMBER IN  
GOOD STANDING"!

<sup>4</sup> Campbell, W. C.; *A Text Book on Orthopedic Surgery*, pp. 274-277. Philadelphia, 1930.

<sup>5</sup> Henderson, M. S., and New, G. B.; *Ankylosis of the Jaw. Surg., Gynec. and Obstet.*, pp. 451-458, November, 1918.

<sup>6</sup> Dorrance, G. M., Webster, D., and McWilliams, H.; *Arthroplasty Upon the Temporo-mandibular Joint. Ann. Surg.* Vol. 79, pp. 485-487, 1924.

## PRESENT STATUS OF PROSTATIC RESECTION\*

W. W. HEWINS, M. D.  
EVANSVILLE

No branch of surgery has advanced more in the last decade than the field of urology. Probably no portion of the human anatomy has received more attention during the last few years than vesical neck uropathy.

The purpose of my paper is not to give the complete history of transurethral surgery. As early as the sixteenth century Ambrose Pare had attempted it. In the early nineteenth century the English surgeons, Blizzard, Guthrie and Stafford did likewise. In 1890 Wishard successfully cauterized the prostate under vision through a perineal opening. Young added the first efficient prostatic punch, Caulk the cautery, and Collings working under Keyes, the electric cutting knife. Stern added the cutting loop and Davis perfected and popularized it. Other instruments such as the Caulk and Braasch Bumpus punch, the Stern McCarty instrument, simplified the technique of the actual cutting. Many other excellent instruments have been devised, too numerous to mention in this short paper.

The transurethral surgical treatment of vesical neck obstruction, starting slowly and receiving little publicity at first, blossomed almost overnight into a nationwide sensation. Following closely upon Dr. Davis' excellent paper in 1931 at the Memphis meeting of the American Urological Association, a wave of enthusiasm swept over the country that was almost unparalleled. Up to this time a few men such as Caulk, Collings, Stern, Davis and Bumpus, had been quietly working and perfecting a splendid technique. In spite of their warnings that Indians were lurking in the background, large numbers of urologists and general surgeons purchased equipment and started after the elderly prostatic. This enthusiasm was aided by many manufacturers who pictured the operation as a very minor one, a simple procedure easily performed. They sold many general surgeons and non-operating practitioners resectoscopes and electrical equipment with disastrous results in many instances.

A great many of the good urologists classed the operation, for a time, as simple and some few published articles giving that impression. Naturally many surgeons just starting the work did not take a serious attitude as to preparation of the patient, equipment for, and the technique of the operation which they later realized was absolutely necessary. After-care was not emphasized.

I wish to quote here from a letter of a urologist friend which I feel is very descriptive of this period: "I watched one operator recently in one of

our largest cities perform a resection before a considerable audience. The operating room was not darkened in any way. The patient was wheeled in, gagged, and securely tied to the table. The surgeon asked the resident about what type of prostate it was and admitted that he had not cystoscoped or studied the patient previously. The resectoscope was slipped in place over the objections of the patient and five or six small pieces of prostate were removed. A catheter was placed in the bladder and the patient wheeled away. The surgeon turned around to the stands and said quite casually, 'Gentlemen, that's all there is to it,' indicating, of course, its simplicity. I know for a fact, two of the men seeing the operation performed for the first time immediately purchased full resecting equipment and departed into the hinterland. You could not help but shudder to think of those old fellows with enlarged prostates that they were to go gunning for."

It was just this sort of demonstration and bally-hoo that justified the attack against the operation. The lack of proper preparation, the faulty instrumentation and technique, with little after care caused such complications as hemorrhage, gangrene of the bladder neck, prostatic abscesses, pyelonephritis, uremia and death. Many other complications such as stricture of the urethra, epididymitis, etc., added to swell the tide of the "anti-resection wave" that arose for the time. Many condemned the operation without so much as a trial while others meeting difficulties in a small series of cases done half-heartedly and without proper equipment threw up their hands and joined the clamor against the procedure.

It remained for such men as Alcock, Davis, Thompson and Bumpus to stem the tide and steer the operation into calmer and deeper waters where so many shoals were not present. With proper equipment, thorough knowledge of the anatomy of the prostatic urethra and an exacting technique, prostatic resection began to attain the place in urologic surgery to which it was entitled.

About this same time manufacturers began to improve electrical machines for use with the resectoscopes. The machines were of much greater power, delivering current smoothly and with more precision. This allowed better constructed cutting loops to cut faster and leave smooth surfaces after the bite was removed. The loops themselves were diminished in the diameter of the wire, thus giving easier cutting with much less charring of the tissue remaining. While this at times caused slightly more bleeding at the time of the cut, the smooth surface allowed greater accuracy of visibility and less coagulation. This shortened the convalescence and minimized shock.

During this period many ingenious and necessary accessories were developed for checking of hemorrhage, evacuation of clots in secondary bleeding, picking out pieces of tissue left behind

\* Read before the Section on Surgery of the Indiana State Medical Association at Gary, October 9, 1935.

during the operation and improved telescopes with greater fields of vision.

From the stage where a few small pieces were removed from small bars or lateral lobes the operation passed through the canalization period to that of actual excavation of the growth. Beginning with a gram or two of tissue, operators now remove many grams of tissue and in quite a few instances over one hundred grams has been resected to make the operation a complete success.

Many men who condemned the operation without performing it or after doing only a few cases returned to the belief that prostatic resection has its place in urologic surgery.

After the many decades necessary to conquer the complications of radical prostatectomy and to place it on its present plane it seems flying in the face of providence to expect prostatic resection or any other new type of operation to be perfect overnight.

In my experience I have found the best results and the most enthusiastic operators among those who have done the largest number of operations. Conversely, I have found the poorest results and the least enthusiasm among those operators who have done only a small series of cases or none.

Personally, I feel that transurethral surgery has its definite place and that it is one of the greatest steps forward in urologic surgery in the past twenty-five years. I know of no other operation which gives the phenomenal relief that prostatic resection does to the more aged prostatic who a few years ago would have been condemned to death or at least a catheter life for a year or two with all its inconvenience, complications, and suffering.

I wish to give you a few statistics which will show a comparison between prostatic resection and prostatectomy.

For 1933, taken from Dr. Caulk's paper, statistics collected from 196 urologists:

Total resections .....	.8,073
Deaths .....	302
Percentage .....	3.74%

In 1934, statistics obtained from 28 urologists throughout the country:

Total resections .....	.2,895
Deaths .....	77
Percentage .....	2.7%

Total prostatectomies .....	628
Deaths .....	29
Percentage .....	4.6%

In 1935, statistics obtained from 14 urologists:

Total resections .....	.1,493
Deaths .....	23
Percentage .....	1.5%
Total prostatectomies .....	66
Deaths .....	1
Percentage .....	1.6%

While I am reporting fewer cases for 1934 and 1935, you will note that there are more than sixty per cent more resections per operator than were reported in Dr. Caulk's paper for 1933.

You will see by the above statistics that the death rate of resection has gradually declined and with added experience and skill should compare

at least favorably if not much better than prostatectomy. When you take into consideration that patients are being resected daily with good results that are not fit subjects for prostatectomy, we feel that prostatic resection is here to stay, especially in the hands of those men who are willing to perfect their technique and equipment.

In closing, I feel that prostatic resection has established itself as a definite field in urologic surgery. It is a highly technical operation which requires especial skill, profound knowledge of the normal and pathological anatomy of the vesical neck, thorough preparation and after treatment, a complete equipment to meet all emergencies and, last but not least, a strong back.

#### DISCUSSION

WILLIAM F. BRAASCH, M.D., (Rochester, Minn.): I have listened to this very excellent resume with a great deal of interest. There is no question whatever but that transurethral resection is here to stay and, in my opinion, is here to replace the former methods of treatment. Prostatectomy, either suprapubic or perineal, is doomed and will soon be obsolete. Last year we did three suprapubic prostatectomies, this year one. Last year we made 690 resections and this year we will perform over 750. This opinion is not a theory, but experience obtained from approximately 2,000 prostatic resections.

I agree with the essayist that this procedure is not simple. It is not a procedure for the general surgeon. It belongs to the urologist. It requires a very thorough knowledge of the anatomy of the prostate and urethra, and also unusual skill and dexterity in the use of the resectoscope. Furthermore, it is not alone a specialty belonging to the urologist, but a specialty within a specialty. There are only certain urologists who should do it and can do it the way it should be done. I dare say there are not more than twenty or thirty skilled, competent resectionists in the entire country today. By that I mean an operator who has a mortality following resection of two per cent or less. There are a few who have a record of less than one per cent.

That brings up the question of the best technical procedure. The two methods usually employed are (1) the loop method, using the high voltage current and cautery with a McCarthy or Davis instrument; and (2) the punch method, using either the Braasch-Bumpus or Caulk punch. Many years ago, following the introduction of Dr. Young's punch, I modified his instrument so as to add adequate visualization. Since then Dr. Bumpus and others of my colleagues have made various improvements and developed the technic we are using today. In the last two years we have used this method in 1,500 patients with seven deaths, or a mortality of considerably less than one per cent. Although prostatic resection should not be done by anyone without wide experience, it is astonishing

how many men consider it within their province to use a resectoscope. I saw a patient recently who had been operated on by a physician who considered himself a urologist. Although the enterprising doctor had no experience with a resectoscope, he borrowed one from a neighboring urologist. I saw the patient two months after resection and found that his sphincter control was completely lost and there was a urethrorectal fistula present. It should be emphasized that the resectoscope is a dangerous instrument to use except in experienced hands.

The success of transurethral prostatic resection depends not alone on skillful operative technic, but even more on a carefully established system of post-operative treatment. Of greatest importance is the maintenance of rigid asepsis, not just at the time of operation, but continuously after operation. This entails nurses, technicians and physicians skilled in the care of the urethral catheter, who see that the transurethral drainage is adequate, that any blood clots are prevented by frequent irrigations, and if formed, are taken care of immediately. Needless to say, they have many other duties to perform, such as the giving of transfusions and intravenous saline and stimuli.

What are the end results? It is probably too early to say definitely, but as far as we have observed, in the patients who have been resected as far back as four or five years ago, the end results have been very favorable. Recurrence of prostatic obstruction after thorough resection has been observed in less than five per cent of the patients. I am quite certain that the percentage of late recurrences in the future will be under that figure. It is possible that patients will return for further resection because of inadequate resection by urologists who removed only the top of the obstructing prostatic tissue and established a temporary channel only. The best results can be obtained only by thorough resection of the prostatic tissue at the bladder neck. I am quite certain that resection will accomplish all that prostatectomy did.

**ERNEST O. NAY, M.D. (Terre Haute):** Resection is not a minor procedure. Dr. Hewins has told you that in the most experienced hands we have a mortality and in the hands of inexperienced men the mortality is very much higher. This operation must be done by a urologist, by a man who is familiar with the cystoscope and who knows all the landmarks of the bladder and urethra. One cut wrongly placed spells defeat. The general surgeon should not do this operation any more than he should do a bronchoscopy.

A number of complications found in the literature are due to inexperience in the operation or to inadequate pre- or post-operative care.

Many men believe that nearly any prostate should be resected, regardless of the type. There are some doctors who are more conservative and

I fall in that line. As I do more operations, however, perhaps I will change my mind but at present I believe there is still a place for the old prostatectomy.

Given a case of a large prostate which about fills the bladder, having a long prostatic urethra in a man about fifty years old or in the early sixties, in good physical condition, I believe that complete removal would be indicated. Now, take this same case and have him seventy-five or eighty years old, in poor physical condition, with a bad heart, assuredly a poor risk, that man certainly should be done by prostatic resection. It is true that this patient may not have quite as good a result as he would have if the whole gland were removed, yet I think he would be living at the end of the operation.

The result of resection is ideal for fibrous prostates. I think we can all remember when we tried to remove these. Of course, we just took a few pieces out and quit.

The procedure is also ideal for carcinoma. By prostatic resection, the obstruction can be removed. You may have to repeat it in a year or two, but this is a lot better than doing a suprapubic cystostomy and putting in a tube which has to remain for the rest of the patient's life.

There is nothing quite so sensational as removing a median bar, taking out a few pieces of tissue, and then watching the result.

I agree with Dr. Hewins that resection has established itself as a definite procedure in urology, and I am very enthusiastic about it.

**A. J. SPARKS, M.D. (Fort Wayne):** There is one thing I think important in the discussion of this procedure and that is the time when these patients should be operated upon. I mean, when we were doing suprapubic prostatectomy only, the patient was always told to wait until he could not wait any longer and then he was advised to be operated. But with resection many of these patients can be operated early, and we have a right to advise it because if properly done, as has been pointed out, the operation carries much less risk than prostatectomy. In addition, the sufferer is spared all the sequelae and the irreparable damage of late prostatism.

At what stage, then, or how far advanced must the symptoms of prostatism be before one is justified in recommending operation?

**QUESTION:** What is the opinion of the Mayo Clinic concerning resection for prostatic carcinoma at the present time?

**WILLIM F. BRAASCH, M.D. (Rochester, Minn.):** There is no question but that transurethral resection has revolutionized our methods of treatment with prostatic obstruction. Many patients that we now resect would not have been operated on by the old method. Many would have been told to go home and wait until more trouble developed, and some would wait longer than they should. To-

day we advise resection early; that is, wherever there is a definite history of urinary obstruction and evidence of residual urine. It may be advised if the obstructing prostatic tissue is found on cystoscopy, even though there be no residual urine at the time of examination. In fifty per cent of our patients less than three ounces of residual urine was found on examination. On the other hand, we have resected many patients with a wide variety of lesions, such as advanced myocardial disease and coronary thrombosis, patients with psychosis, with large herniae, with pernicious anemia, with metastasis to the spine, and so forth. We are willing to take a chance, realizing the relief they will experience from restoration of bladder drainage. It has been said that some urologists have done resection where it is unnecessary and I have seen patients where, judging from the history, I wondered whether there was anything to be removed. If there is any evidence of obstruction, and if there is any tissue there that should be removed, there is nothing to be gained by waiting until there is a large amount of residual urine or dilatation of the bladder. In this way we will obviate the risk of uremia and other complications.

As to the treatment of prostatic carcinoma, we employ trans-urethral resection only when there is evidence of obstruction. Where there is difficulty in urinating and evidence of obstruction, this is undoubtedly the best method to employ. One of the arguments claimed for open prostatectomy is that a limited area of secondary carcinoma which occasionally is found with prostatic hyperplasia may in this way be eliminated. In a review of our patients in whom prostatectomy was performed, the number in whom apparent secondary carcinoma was found in the adenoma was very small. Furthermore, in looking over their records, as well as those patients operated on for early carcinoma, the mortality was just as high as though we had done no operation. I question whether prostatectomy can be done for carcinoma with any good result, for the simple reason that at the time of operation the malignant process has already spread outside the gland. Therefore, the results with resection are just as good and in fact even better. I strongly feel that resection is the better procedure with carcinoma, even if you have to repeat it.

WILLIAM N. WISHARD, SR., M.D. (Indianapolis): I have been very much interested in the paper and the discussion. I think we are likely to be discussing the subject for the next ten years.

There are some mechanical difficulties in cystoscopic work that are frequently encountered. There are very few cases of enlarged prostate that have exactly the same type of mechanical obstruction. We know that when we introduce a cystoscope into the bladder we cannot see the bladder or the growth until the distal end of the lens has entered the bladder. In other words, we must straighten the urethra which, previous to the use of the

cystoscope, was a sharply curved canal, and we have thereby produced mechanical difficulties. I called attention to this some fifteen or twenty years ago. A cystoscopist told me he thought I was mistaken because he thought it was possible to use the cystoscope without displacing the growth, but that is a matter of experience. It is obvious that you cannot straighten a crooked canal without producing mechanical change. Another point which has interested me very much is the question of selection of cases. I am still of the opinion that a very large percentage of cases are best treated by prostatectomy. It becomes a question of discrimination, a question of careful diagnosis, to determine what class of cases should be submitted to resection and what class should be given prostatectomy. We have as a result of the resection method done a great deal of good. It does apply to a very considerable group of cases. Suppose that you have a case where there is a beginning malignancy which is developing posteriorly. Suppose you resect that case. You have tunneled a channel through the obstructing growth. If you had done a prostatectomy you would have an opportunity to remove all the growth in the beginning and to give that patient a longer lease of life. I know nothing which requires more careful judgment and discrimination than in determining whether you do a resection or whether you do a prostatectomy. In cases where we have a middle lobe, a transverse bar or a little thickening around the vesical orifice, it is obvious that such cases can be dealt with by resection, but when you deal with a large, massive growth you have a question that is more troublesome as to how far you should go, how much to remove and what may remain, and how soon the obstruction may return.

On the one hand, we have more shock and a more formidable surgical procedure and a longer convalescence if we do a prostatectomy. If our patient progresses favorably and there is no malignancy, there should be a permanent restoration of bladder function.

On the other hand, when we do a resection we may, in a very large proportion of cases, remove the obstruction with a minimum of surgical shock and a shorter convalescence. However, delayed hemorrhage, sometimes occurring a week or ten days following resection, may prove a serious after result. There may be a recurrence of the growth in a few months and resection may have to be repeated. Resection has been a great boon in properly selected cases, and even in advanced malignant cases a tunnel can be channeled out which will give the patient more or less prolonged relief as to bladder function. On the other hand, if malignancy has commenced posteriorly and we remove only the mechanical obstruction to urination by resection, and do not include the malignant area, it would have been better to do a prostatectomy.

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OF THE

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FEBRUARY, 1936

**EDITORIALS****BLINDNESS IN CHILDREN**

Some time ago the Section on Ophthalmology of the A.M.A. appointed a committee to study the causes of blindness in children. A report of the findings in connection with a study of 2,702 children in schools for the blind, during the school year 1933-1934, is published in *The Journal of the American Medical Association*.<sup>1</sup>

Eighteen residential schools, together with the public school braille classes of two cities, were surveyed by the committee. The total enrollment in these schools represents about one-half of the children registered in such schools throughout the country.

The committee set up a standard classification of causes of blindness only after consulting a representative group of ophthalmologists.

The ages of the children in these institutions were, of course, varied. The greater proportion was from 5 to 20 years or over, with 35% between the ages of 10 and 14, and 34% from 15 to 19. The degree of visual loss ranged from total loss of vision (37.1%) to better than 20/70 (3.7%).

The causes of blindness were many. Congenital or hereditary conditions accounted for 51.1% and the infectious diseases 28.6%. A very interesting observation is that only 3% were traceable to ophthalmia neonatorum which, less than three decades ago, caused the presence of 35% to 40% of the children in our schools for the blind.

Syphilis is directly blamed for about 5%, though

it is certain that this disease is at least indirectly responsible for a greater proportion of blindness in children.

Traumatic and chemical injuries account for 7.8%; 2.5% are attributed to the accidents of play.

A topographical table of the causes of blindness is of unusual interest. Glaucoma is a relatively unimportant cause of blindness in children, 0.2% being the listing for this disease. Myopia is given as 3.4%, while approximately 25% result from developmental and degenerative changes in the eyeball. Corneal conditions are responsible for 14.4%, principally some form of keratitis, and 15.7% are due to lens opacities. Choroidal and retinal pathology account for 14.4% and the optic nerve is charged with 16.7%, of which the greater number of cases are due to atrophy.

The report affords material for deep reflection, since too many wholly preventable conditions appear in the list. In the present day knowledge of things, there is no occasion whatever for a 3% listing of ophthalmia neonatorum as a cause of blindness in children. This is an entirely preventable condition and that 3% stands as an indictment against those engaged in obstetrical practice. Of course, it may well be said that much of this can be directly laid at the door of the mid-wife, but the fact remains that, through education of the laity, this evil can and must be corrected by our profession.

Syphilis is charged with 5.3% of the cases. As the report says, "The antepartum care of syphilitic mothers, better treatment of syphilitic diseases in syphilis clinics, eye clinics, and hospitals, and better organized social service and follow-up work will aid greatly in reducing the number of children who may become blind from this cause."

Regarding blindness from traumatism, we regret that the report does not specifically cite the number of cases directly resulting from that instrument of the Devil, the air gun. Our own experience is that injuries from this wholly preventable source are quite numerous. (Preventable by prohibiting the sale of that damnable instrument.)

The presentation of this report elicited a very hearty discussion during which Dr. Harry Gradle took occasion to remark that "70% of the blindness in the United States is unnecessary and could be prevented and eliminated in the course of the next generation." Further, he spoke of a survey of the Illinois School for the Blind which showed that some 24% of the inmates were there unnecessarily, since their vision was such that they could continue their education in the seeing world, and that another 25% could be restored to the seeing world by surgical measures. For two years following this survey, ophthalmologists of Illinois carried out these remedial measures with the result that the population of the school was reduced to the extent of 40%. Sight saving classes, made up from communities which had no such provision

<sup>1</sup> Berens, Conrad; Kerby, C. Edith; and McKay, Evelyn C.: Causes of Blindness in Children. *J. A. M. A.*, Vol. 105, No. 24 (Dec. 14), 1935, p. 1949.

in their schools, occupied the space voided by this forty per cent of inmates. Dr. Gradles states that it costs about \$960 per year to educate a blind child in Illinois, while the education of the normal child costs about \$45 per year.

Dr. E. V. L. Brown advocates a smaller print for sight saving classes, as small as eighteen point type.

The interest of every practicing physician should be aroused by this report. It is quite comprehensive in character and contains much material that might well be applied here in Indiana. It is not a problem for ophthalmologists alone; it becomes the duty of the profession as a whole to take such steps as may be deemed advisable not only to prevent future blindness insofar as lies within our power, but to see that the visually handicapped within our borders are given every possible remedial agent.

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## THE SCREAMING AMBULANCE

All of us, at one time or another, have stood on a curb and watched the big, red ambulance as it went careening down the street. One wonders if such speed saves half as many people as it destroys. There has been much argument as to whether or not it is necessary for the ambulance to be driven at such speed. It is probable that very few people realize why it is necessary.

The fact of the matter is that almost invariably the ambulance belongs to a municipal hospital rather than a private one, and the reason that it must be driven at a rate which is dangerous to the public health lies in the fact that it belongs to the people; therefore, they feel that they have the right to insist upon immediate and spectacular service. When an accident happens, or when a patient is alarmingly ill, in the judgment of the family, the minutes may seem as long as hours. It is not uncommon to hear the complaint that the ambulance was called and did not arrive "for at least half an hour!" The family and the spectators are standing about wringing their hands and saying that something should be done about it. More than likely someone calls the mayor and registers a complaint. The hospital is called a second or third time and asked "when that ambulance is going to get there." Probably the police headquarters and the city board of health are called. In order to avoid this criticism, either expressed or tacit, the ambulance goes at break-neck speed, flashing through the streets in a blaze of glory. It is vastly reassuring to see the interne in his white suit sitting on the front seat, ready for any emergency.

We have in this picture a preview of what may be expected if medicine becomes as thoroughly "socialized" as is the municipal hospital. Everyone understands, of course, that there must be hospitals of this sort and that this is not intended

in any sense as criticism of such institutions. It is only that institutions of this sort, being highly socialized, are subject to a form of pressure which is not felt by private institutions. Such hospitals belong to the people and are, therefore, subject to all sorts of public demand. They must not only be effective but, even more, must give a great show of their effectiveness. The general populace rarely sees the hospital itself or knows anything whatever of the fine points of its administration. They do, however, see the ambulance. One might say that it is the loud speaker. Every physician knows that it would serve its medical purposes even better if it were simply a well-equipped automobile which is driven without particular haste to the patient and transported him quietly to the hospital. But who shall say that the purposes of medicine shall take first place in a situation of this sort? The purposes of politics, propaganda, and publicity must first be served and then, if any money is left, the hospital may buy bandages. Much might be said for and much might be said against the trend towards socialized medicine. The most convincing argument against it that we have seen or heard is exemplified by the screaming ambulance making much ado about nothing. So long as this condition composes but a comparatively small part of the whole of medical practice, physicians may stand on the curb and smile indulgently. When, however, the time comes that a large part of medical practice must consist of ballyhoo to charm the gaping public, it is likely that we shall see less effective medicine and surgery but better and better ambulances with louder and more blatant sirens.

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## THE ANSWER

The medical profession has been "under fire" for some time by a group of no mean proportions who seemingly have set out to force the issue of state medicine. They have stopped at nothing in the furtherance of their program, departing from the truth occasionally without apparent compunction. It is probably correct to say that this idea had its first large inception in the minds of those who were managing various of the larger foundations-foundations with incomes of such extent that they seemed hard put to find ways and means of disposing of same. This, together with the fact that certain of these folks were dreamers, looking toward some Utopian plan, laid well the foundation for what followed.

Recently some of the "foundation" and "fund" folks have come to the conclusion that perhaps it might be well to get off this particular bandwagon. In one organization, the most disturbing element has been detached from his job, and it is apparent that we will have little to fear from that source in the future. Another "fund" has, for the time being at least, soft-pedaled the matter of state medicine,

and we believe that these actions came about as the result of personal experiences on the part of the heads of these organizations.

We had only just begun to feel a sense of relief when along came these high school debates. Naturally, the young debaters looked to the medical profession for information to combat the affirmative of the question. To our discomfiture we found that many of our members were unable to advise these young folks properly. The affirmative overlooked no bets, mind you; they were fortified with handbooks and other printed material, all setting forth the great advantages accruing from this system of medicine. The Bureau of Economics of the American Medical Association was on the job, and in no time had available handbooks giving "our side" of the case, but (sad to relate) too little interest was given the subject by those whom the students consulted. Information was given without the informer having posted himself on the subject, with the result that the negative debaters have not had the advantage of material available for the asking. We can only await the result of such preparation. Others have profited by the use of the material (see distribution map on page 87).

We would not overlook the work of Morris Fishbein and R. G. Leland in the nation-wide hook-up radio debate presented a short time ago; nor the visit of Dr. Fishbein to Purdue University where he met high school debaters from all parts of Indiana and was able to set them right on many phases of the question. Such work has been of inestimable benefit to us.

Now for the answer. We believe that it is to be found in only one way—organization. Yes, it is true that we have our state medical association, and we yield to no other state when it comes to a question of getting up and doing things. Indiana has reason to be inordinately proud of her accomplishments in the field of medicine. But we are not *wholly* organized; too many eligibles are without the fold. There is no good reason why every legitimate, reputable practitioner of medicine in Indiana should not be a member of our State Association in 1936. (By the same sign, there is no apparent reason why every member of our Association should not be a Fellow of the American Medical Association.) If we can but go before the people with a united front, we can defeat each and every endeavor to throttle the science of medicine with a political yoke. At the beginning of a new year is an excellent time to do this thing, and it must be done through the county medical society—the backbone of organized medicine.

Three thousand members of the Indiana State Medical Association can control this situation, but *four thousand* could do it infinitely better and in much less time. That is our answer.

## MEDICAL LICENSURE

Once more the editor of the New England Journal of Medicine takes up his cudgels against the second, third, or what-have-you rate of medical schools. In an editorial he sets forth his views in no uncertain style. Massachusetts, proud state that she is, is one of the sore spots in the matter of medical education, notwithstanding the fact that several famous medical schools are located within her borders.

According to the editorial, there are eleven licensing groups in the Division of Civil Service and Registration in the state house at Boston, ranging from massage of the scalp to chiropody. The strange thing about it all is that in every case, except medicine, the various boards are authorized to recognize only "reputable schools." In the field of medicine, the Board has no such legal privilege; it seems that they must admit to examination a graduate of *any* medical school within the state.

The question is properly asked, "Is medicine the least important of the various eleven groups?" For years we have been interested in this Massachusetts situation; we have met with some of the graduates of the unrestricted schools of that state. During a rather extensive term on the Indiana State Board of Medical Registration and Examination, there was frequent occasion to observe conditions in that state. We have done postgraduate work in Boston, and have come away with the feeling that were medical education more properly supervised in the Commonwealth, Boston would ultimately become the medical educational center of the country. The writer of the editorial makes it quite clear that the whole trouble lies in the fact that the schools in question are able to muster enough support to defeat any and all attempts to remedy the situation by proper legislation. He quotes from the Constitution of Massachusetts wherein it specifically states that the people have the right to request of the legislature that they be given "redress of the wrongs done them, of the grievances they suffer." He then concludes, "no one knows as do the physicians how much suffering unqualified practitioners cause. If they know, let them speak."

We repeat that we have long entertained a very exalted opinion of the medical profession of Massachusetts as a whole. Many of our great leaders have been residents of that state. In spite of the handicaps under consideration, medicine has made great progress there. Few states have better hospital facilities; few states offer better opportunities for postgraduate study, yet there is that ever-present specter lurking about, that stench that inevitably comes from unrecognized teaching units.

The remedy actually lies in the education of the public, the thing that the New England Journal of Medicine seems to have set about to do. We have an abiding faith in our public; they will

"come through" in noble style, once the situation is properly laid before them.

In Indiana, we are inordinately proud that such a situation is impossible; medical education is today as secure as the rock of Gibraltar. We continue to thank that "grand old man of Indiana medicine"—Dr. William Niles Wishard—for his indefatigable labor, for his keen thinking, and for his personal work among the legislators in 1897 which resulted in what is generally known as the "basic law of the practice of the healing arts" in Indiana. Dr. Wishard builded better than he knew; it seems uncanny that a man could build a structure that would endure, with minor changes, for almost four decades, a structure that continued to meet practically every problem that arose during the long period. Indiana medicine is on a secure footing, and it becomes our wish that Massachusetts may awaken to the very seriousness of her medical education problems and that she may hold her head high among her sister states.

## EDITORIAL NOTES

If your dues are not paid, you are delinquent NOW.

100% Societies: Dearborn-Ohio, Noble and Hancock.

All children with umbilical pain, followed by vomiting, have appendicitis until you prove they have something else, and then they have appendicitis also.—*Brit. Med. Jour.*, June 29, 1935.

We are thoroughly in accord with the editor of the *Nebraska State Journal of Medicine* in his editorial discussion of "Mercy Killings Not Desirable." Such matters should properly come before medical groups, if they are to be discussed at all; they should not be handled by the lay press. The front page publicity recently given the subject in America was most unfortunate.

While casting your weather eye about, in looking over primary candidates, do not forget to make a careful scrutiny of your Congressional candidates; the mere fact that this or that chap avers he "will stand by the President" means little or nothing. Never before in our time have we needed real men in Congress so much as we do now; by your ballot, choose the man best fitted for the job, regardless of his political alignment.

An exchange is responsible for the quotation from an article on Russian medicine, as follows: "In Russia a woman is entitled to six abortions a

year and they are done on her request only. It is illegal to have it performed except in the clinic maintained for that purpose. Russia has a lower death rate than any other country at the present time. One afternoon there were thirty-five done in that particular hospital." Well, that beats any record we know of, hereabouts!

### WARNING!

Federal authorities are on the trail of a man who may call at your office, seeking advice concerning a close relative who may need your services. Before leaving, the man usually says, "By the way, our doctor has given the patient something to relieve his pain . . ." A check-up has revealed that several physicians in central Indiana have prescribed narcotics for the phantom patient who never is brought to the office. The man has contacted several physicians in Indianapolis and surrounding towns. Notify headquarters office immediately if he calls upon you.

Why not each doctor, regardless of his practice or place of abode, assign himself a medical subject or paper to work up? What does it matter about its publication or delivery? The pride of being a student once more will be rejuvenating. The packet library of the American Medical Association and the Surgeon General's Library brings to our doors boundless scientific treasures. Going a little further, why not compile all the information in the form of a paper on your favorite sport, pastime, hobby, or favorite great man of history? The busiest men we know have time for such things. Why are they busy?

Frequently we hear, in general forum, much said about the wonderful happenings to social structure abroad, only to find that the speaker has gained no first hand information. It is a pity that these people who flay American weaknesses and wickedness can not be deported for a while to the isle of their dreams. Along this line, we wish some one would give us some attractively prepared booklets on what is going on in European socialized medicine. Of particular interest would be some photographic illustrations, for these catch the eye and serve a greater purpose in the reception room. Let us not forget that the majority of our patients have faith in our unexpressed opinion of waiting room literature. There lies a great opportunity for silent and visual education.

Not since reading "Equinimitas," that beautiful homily by Sir William Osler, have we read anything in the way of an address to medical students

that appealed to us as did the lecture by Dr. James B. Herrick<sup>1</sup> entitled "The Successful Doctor and the Human Side of Practice," which he presented before the medical students of Harvard University, November 7, 1935, as the George W. Gay lecture on medical ethics. It is filled with the experiences of a more than ordinarily busy practitioner of medicine; it overflows with observations on human nature as seen by the physician; it carries advice that is invaluable to those studying the greatest of the sciences, medicine. We sincerely hope that the lecture may be made available to medical students and practicing physicians.

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HYGEIA, that magazine issued by the American Medical Association, primarily for the laity, might be read with profit by every physician. The January, 1936, issue is especially good; any reader could find much to interest him for an hour or so. HYGEIA has been making some very attractive subscription offers to the profession, and we strongly recommend it to those who are not now receiving it. We have noted its popularity as a reception room magazine; it is picked up more frequently than any other magazine about the office. As a matter of fact, HYGEIA seems to be one of those publications that remain in the office for only a short time; patients become so interested in it that they forget the little consideration of ownership.

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William J. O'Brien, an attorney of Des Moines, Iowa, has an article in the Iowa State Medical Journal for November concerning "Precautions Against Malpractice Suits" which is worth more than casual reading. While it is true that these suits are not so numerous as they were a little while ago, we agree with Mr. O'Brien that most such nuisances are avoidable. Among the things listed as preventive are:

1. Keeping up-to-date in your profession.
  2. Accurate case records.
  3. Care in the upkeep of office and hospital equipment.
  4. Due care as to duties assigned to assistants.
  5. Be cautious in your criticism of the other fellow.
  6. Diplomacy in the matter of fee collections.
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When someone sues a doctor and gets judgment, that is regarded as news and is prominently played up in the lay press, but when a doctor sues and gets judgment, we believe that is sensational. A physician in Adelaide, South Adelaide, Australia, sued a manufacturer of underwear, as well as the dealer from whom he purchased it, making the complaint that he had acquired therefrom a

dermatitis that caused him untold suffering and a several months absence from his business; he obtained a judgment amounting to \$12,500, said judgment having been upheld by the high court of that country. It was proved that the manufacturers had failed to remove the sulphites from the underwear, said sulphites being blamed for the infection. "Sue the doctor" has been a very popular slogan these past few years, and we rather relish a reversal of the order, with the doctor on the winning side of the suit.

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Vacation time is over except for a favored few who will find their way before long to Florida. In retrospect, did each of us get all done possible? Did we give our family members as much of our time as they deserved? Did we permit our patients to interfere unnecessarily with our plans? Why not begin now to plan what will be our vacation next year? Why not get it worked out at the fireside or in the den this winter? Then in the spring begin to tell our patients when it is going to be, and what it is and why. See how soon they will begin to plan inadvertently to get all straightened up themselves to be ready for our vacation. And when one returns to the office, these patients will be right there, bringing others with them. Doctors' sense of service and sometimes apparent persecutory delusional trends have led them to enjoy being slaves to their clientele. Such pay no dividends in a premature end.

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It is very unfortunate that the A.M.A. radio program, presented on Tuesdays at 4 p. m., Central Standard Time, is not given on a more popular hour, for we believe that many thousands of people are thus cheated out of what would soon become a popular program. During a recent illness, we tuned in on that NBC feature and were most agreeably surprised to note its worthwhileness. "Hunting accidents" were graphically portrayed by the NBC artists and for the conclusion, Morris Fishbein gave a resume of the subjects that had been so ably presented. A week later we heard about "Animal Diseases in Man" covering the subjects of tularemia, spotted fever, tetanus, and hydrophobia. Following the portrayal, Dr. Bauer gave an interesting talk on these diseases, their prevention and treatment. The American Medical Association is to be congratulated on these presentations and we sincerely trust that arrangements may be made for a more favorable hour.

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THE National Safety Council estimates that 36,400 persons died in motor vehicle accidents in 1935. This is a matter of interest to every citizen, and something must be done about it. The Indiana State Medical Association recently appointed a special

<sup>1</sup> Herrick, James, B. New Eng. Jrnl. Med., Jan. 2, 1936.

committee to study this problem, and at the recent midwinter meeting of the Council, a preliminary committee report was made by Dr. Murray N. Hadley who indicated that his committee intended making an intensive study of the matter. At about the time the Safety Council released the above figures, there came another report for 1935, to the effect that not a single passenger on our American railroads was killed during the year. This probably is the first time in the history of American railroading that a perfect record has been achieved. For many years we have been a devotee to railroad travel; yes, we have an automobile, but find the railways affording all the accommodations necessary to a speedy, comfortable journey to almost any point and, as is borne out by the figures above quoted, we believe it is infinitely safer!

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Foot surgery has been the subject of numerous comments in the medical press, mostly to the effect that physicians should give more attention to it, and that too much of this work is done by unqualified persons. Occasionally it is observed that the physician who will give due attention to such work will find his income materially increased. Dr. Walter I. Galland<sup>1</sup> attacks the "corn" problem from an angle new to us, and makes very clear just what he does with these obstreperous conditions. He uses the flap or window method of operation, and removes not only the corn but the predisposing cause. We know of no good reason why this matter should not have the attention of the medical profession, to which it rightfully belongs.

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The editor of one of our state medical journals devotes far too much space to attacks upon the present Federal administration, in our opinion. His attacks are long-drawn-out, to the extent that they smack of a purely political aspect. Early in our editorial experiences, we were advised by numerous friends to avoid too intimate discussion of general political questions, and that while it was perfectly proper to discuss certain of these insofar as they related to the profession, in no wise should we attempt a purely political discussion. We have followed that advice closely, and have had frequent occasion to congratulate ourselves on having done so, for we believe that the province of a state journal editor is to reflect the *medical opinion* in his own state, rather than attempt a discussion of political issues of a national character.

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The 1934 volume of THE JOURNAL contained 604 pages of reading matter; the 1935 volume carried one hundred more pages than in 1934, and this was in addition to the eight-page supplement included in one issue. Thus, the 1935 JOURNAL carried 712 pages of reading matter, setting an all-time record for our magazine. Considering the fact that our

various increases in the size of THE JOURNAL have been attained during the worst economic upheaval in the history of our country, we are rather proud of our achievement, which was made possible by the universal support received from members of our Indiana State Medical Association.

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In a recent talk before the Central District Nurses' Association, Mary A. Meyers, R.N., calls attention to the fact that the very people who should know best how to avoid infection are the ones who seem to suffer most from tuberculosis, namely, the student nurse, the graduate nurse, and the interne. In the period from 1928 to 1932, inclusive, in an Indiana tuberculosis sanatorium, there were twenty graduate nurses taking treatment for tuberculosis, more than that number of student nurses, and at one time there were five nurses from one training school. The Marion County Tuberculosis Association has undertaken a study which will cover a three-year period, and which will include the tuberculin testing of all students (nurses). It will show whether the nurse has the infection when she enters or in what year of her service she acquired it. The work was started in 1935. The tests are given by physicians connected with the training schools, and the Tuberculosis Association supplies tuberculin, records, needles, etc. The findings of this study to date indicate that of the entire group of nurses tested, 56.4% reacted positively. In a group of 500 college students, about the same age group as the nurses tested, 45% had positive reactions. In one of the rural high schools (younger age group), 14% showed positive reactions. Nurses and physicians seek to make the hospital a safer place for all the workers therein. We shall be interested in the ultimate figures obtained through this study.

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Much newspaper publicity has been given to the effort of an Indiana town, Economy, to obtain the services of a physician. The town has offered to hire a physician at \$3,000 per year. The reason for this action is unfortunate. For some time, the citizens of that Indiana community have attempted to have a physician settle there, but none was interested. Now the citizens have adopted another plan in an effort to have in their own community adequate care for the sick and injured. We believe that this is a definite challenge to the medical profession. We cannot blame the citizens of a small town for insisting that they have a physician near enough to care for emergencies. Be that as it may, we believe that it is up to the medical profession to provide the preventive and the curative treatment; otherwise the treatment may be provided by outsiders in a way not to the liking of the medical profession and to the detriment of the community. Only a few years ago, when a

young physician started practice, he looked for a location in the small town where he could become acquainted with the people, grow with them, and earn their confidence and support. Now the young physician looks for a comfortable office in a large city where he can "specialize" and limit his hours. This is at least a partial solution of the problem: we need more young physicians who are bent upon giving service rather than making their own comfort and convenience their chief concern.

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Dr. Thurman B. Rice, in discussing "Thee and Me" in the December Bulletin of the Indiana Division of Public Health, has this to say about medical societies: "The medical society which gives the major part of its time to the discussion of fees, and lamentations concerning its own hard lot is like a neurasthenic woman, and not worth a tinker's dam to the community it is supposed to serve. It had better be discussing—most of the time at least—the ways and means by which individuals, families, and communities may be led back to the state of health. The physician who thinks first of his fee, his own welfare and convenience, is a quack and is unworthy of the great profession to which he is supposed to belong." We are quite in accord with Dr. Rice about this thing; too many of our county societies had an "economic complex" a year or two ago. In our own local group, what with every regular meeting given over to this subject, plus several special sessions for the same purpose, we had at least ten consecutive meetings given over to various economic problems, with the result that our attendance dwindled almost to the vanishing point. Numerous members openly rebelled, stating that if and when we returned to a discussion of medical problems, they would resume active interest in the society. It is all very well to devote an occasional meeting to the discussion of business phases of our profession, but we believe that it is easily overdone. We must not overlook the pertinent fact that our job is a health job, and that matters economic are purely secondary.

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The Indiana Recovery News Service has sent out a release concerning certain of the proposed activities of the National Youth Administration, and it contains information that will prove interesting to those who are making studies of automotive accident prevention. The plan proposed will be undertaken in March, and the sum of \$12,000 has been appropriated for the expenses incident to the first month. Young men and women, from sixteen to twenty-five years of age, are to be assigned to the work, and they are to be recruited from families on the relief rolls. The present plans include a study of traffic hazards, the operating of "safety clinics," making safety post-

ers and checking the records of habitual violators of traffic regulations. Our first thought after reading the proposed plan was that youngsters of sixteen might prove incapable of handling many of the problems outlined for study, but it may be that the younger group will be employed in the preparations incident to the campaign. A most heartening thing is the fact that Lieutenant Franklin M. Kreml, of Evanston, Illinois, will be general supervisor of the project, for be it known that Kreml is the man who has made his home city a haven of comparative safety for motorists and pedestrians. For many years, Evanston has had the best record of any city in the country in this regard. Since this subject is one of our hobbies, we shall follow this proposal with great interest. We have an abiding faith in whatever Lieutenant Kreml may say and do in his new undertaking, and we hope that his work may be the means of reducing the terrible slaughter that is prevalent in our communities.

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It is highly significant that great progress has been made in the past few years in the attempt to solve, by medical means, the most vexing of all problems affecting the public health and welfare. A very large part (probably eighty-five per cent or more) of the public above the age of eighteen is more or less tangled in the riddle of sex. For example, there are the thousands of couples that are unhappily married, and the basis of the unhappiness frequently lies in sexual incompatibilities. There are thousands of others who are not married but who would like above everything else to be married. There are countless numbers of homes in which the children are in jeopardy because the father and the mother are quarrelling over something which is directly or indirectly due to sexual maladjustments. There is a great amount of venereal disease. It is said that there are probably half as many abortions as there are births and that men and women are so pressed with the need of avoiding conception that the appearance of the menses is coming to have the significance of a national holiday. Parents without number are worried about the sexual behavior of their sons and daughters. The solution of these problems is not entirely in the hands of the medical profession, of course, but the public has a right to look to the physician for leadership in these matters. No other person in the community has the necessary understanding of anatomy, physiology and hygiene relative to this subject. No one else has *entre* to family life. No one else has the opportunity for service which equals that of the physician. This is our job, and it is an important job. If we do not accept it, we may expect to see ourselves supplanted by someone else who will attempt, at least a solution, and more than likely make a mess of it.

"Man's Last Specter, the Challenge of Mental Disease," is the title of an article by Inis Weed Jones in the December *Scribner's*. Miss Jones is a graduate of the University of Michigan and has done doctorate work in sociology and economics in Columbia. She has taught at Michigan, Mount Holyoke, and has been Dean of Women at the University of Washington. For years she has been writing on sociological subjects, but recently she has turned her pen toward medical subjects, under the direction of physicians. In her present article she discusses our hospitals for mental patients, and she does a good job of it. For a long time, the laity has had a most distorted idea regarding what goes on in these institutions. As a youth we were led to believe that being sent to an "insane asylum," as they were then called, was tantamount to being locked up for life, and that it was a matter of family disgrace to have a member thus sent away. Cures were rarely heard of; the patient remained in the institution until death released him. In later years we retained a horror of all such places, and even in our years in medical college, when we made weekly trips to the Indianapolis hospital clinics, we were not certain of our personal safety. Miss Jones comments wisely as to the various forms of mental aberration and gives due attention to the various types of treatment now commonly used in the modern management of these afflictions. A note of hopefulness enters her picture when she relates the outcome of such treatment, a large percentage of patients being returned to their places in our social life. Another thing of interest is her discussion of the teaching of psychiatry in our medical schools. Only a few years ago, not many of our medical schools had more than didactic teaching; now, many have a clinical course. (In passing, we take much pleasure in the fact that Indiana was one of the pioneers in this regard, for we attended the weekly clinics more than thirty years ago, among our teachers being the present superintendent of the Indianapolis hospital, Dr. Max Bahr.) We commend this article to all our readers as being one of the best of the sort coming to our attention in many years; it affords much material that will come in handy in the future. If you have families beset with the problem, we would recommend that you hand this article to them; it will clear up many of their perplexities. We congratulate Miss Jones on her work, and trust that we may hear from her again and again.

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In view of the pros and cons and arguments and debates now here and coming in regard to state medicine, a few random thoughts are presented in terse form. The ideas are neither new nor original; they are repeated here concisely, merely for emphasis, so that we may not forget.

(1) The economic laws governing supply and demand regulate the distribution of physicians in

the same manner as they do (or rightly should do) in all other fields of endeavor. Idle dream or imaginative fantasy cannot change the fundamentals. The magic wand of state control will not simplify the problem.

(2) In the long run, over a period of years, a physician's income is in exact and direct ratio to the kind and quality of service rendered, everything considered. This is true in any specialty, in any profession, and in any business. State medicine could change the set-up only by stifling initiative and by substituting political intrigue for honestly scientific endeavor.

(3) Despite the accusation, medical practice is not a monopoly. Modified perhaps only by its marvelous code of ethics, it is still a jungle problem, the supremacy of the fittest. State medicine cannot make good doctors out of poor doctors; rather, it would tend to make poor doctors out of good doctors. Human psychology is everywhere the same.

(4) Charity service now being rendered gladly and willingly in America is, in most instances, vastly superior to panel practice and to insurance practice in other countries. This is evident from the facts that in Germany the average sick days per worker per year jumped from 5½ days to 28 days under socialization, and that in England (perhaps due to malingering) there is five times the demand for medical attention from the insured as from the uninsured.

(5) The socialization argument that the burden of cost on the individual would be removed is extremely hazardous misinformation. Costs are never removed. They may be hidden, or they may be transferred by taxation, often inequitably. No government in the world could afford to tax its people to pay for complete medical care as this is interpreted in modern medicine today. Medical practice largely would revert to the forms and customs of a generation ago. It has done this in other countries.

(6) Government operation, in all other fields of endeavor, is expensive operation. Shipping, Railroads, Mail. How can we believe that governmental medical practice would prove an exception? Who bears the increased cost? The taxpayer.

(7) Granted, perhaps, that under socialization the physician would not need to worry about the size (especially the size) or about the regularity of his income, yet such motionless stability hardly would outweigh his multitude of infinitely greater worries in regard to ward-heeler politics and his forever-lost opportunity to provide progressively better service to his patients. No matter how hungry you are, professionally or gastronomically, it is quite likely that there is some one more hungry than are you. He may underbid you, either in price or in service, or in both. Naught but professional disaster would follow.

## FEDERAL INCOME TAX AS IT APPLIES TO PROFESSIONAL MEN

By

WILL H. SMITH

Collector of Internal Revenue

District of Indiana

Indianapolis

Every single person (or married person not living with husband or wife) receiving a net income of \$1,000 or over, or a gross income of \$5,000 or over; or married couples receiving a combined net income of \$2,500 or more, or a gross income of \$5,000 or more, must file a Federal Income Tax Return. The above qualifications for filing hold true regardless of possible dependents or status of a single person as the "head of a family."

### CREDITS AND EXEMPTIONS

A taxpayer is entitled to a personal exemption of \$1,000 if single, or \$2,500 if qualifications as head of a family can be established. Married couples living together are entitled to a combined personal exemption of \$2,500. In addition to the personal exemption, a credit of \$400 is allowed for each dependent actually supported by the taxpayer.

A dependent is defined as a person (other than husband or wife) under 18 years of age, or mentally or physically incapable of self-support, who actually receives from the taxpayer more than half the funds necessary for his or her support during the taxable year. Any such credit claimed must be explained in Schedule F of the return.

A "head of a family" is an individual who actually supports and maintains in one household one or more individuals who are closely connected with him by blood relationship, relationship by marriage or by adoption, and whose right to exercise family control and provide for these dependent individuals is based upon some moral or legal obligation.

In addition to personal exemption and credit for dependents, an "earned income credit" is allowed to the extent of ten per cent of actual earned income. All income for professional services is considered as "earned." Even though an assistant is employed to render such services, if the client or patient is primarily the taxpayer's and he is responsible for the services rendered by the assistant, fees from such services are considered to be earned income of the taxpayer. All income, regardless of source, up to \$3,000 is considered as earned.

The earned income credit may not exceed ten per cent of the "net income" as disclosed in item No. 20 of the return, and in no case may exceed \$1,400. If a physician, in addition to professional services, dispenses medicines or drugs, making a charge therefor, he is considered to be operating a business

in which both personal services and invested capital are income-producing factors, and as such is entitled to claim only twenty per cent of net income as "earned income" and ten per cent of that twenty per cent as an earned income credit. However, if the physician primarily performs personal services and in so doing dispenses drugs or medicines, making no charge therefor, the above ruling does not apply and all fees are considered as earned income.

### ALLOWABLE DEDUCTIONS

Deductions may be made for all expenses incurred in the pursuit of his profession by a professional man.

**OFFICE RENT:** When a professional man uses space in his residence for his office the rental value of the space in his residence occupied by him for his office, if he actually pays rent, may be deducted for the rooms so occupied. Also that proportion of the light and heat expense may be deducted. If a domestic servant is employed in his home and a portion of the time is given by the servant in taking care of his professional office, that portion of the salary of such employee may be taken as a business expense.

**DEPRECIATION OF PROPERTY:** If a professional person owns his own home and uses a portion of it for his office, such portion of the property is subject to depreciation as business expense. If a professional man, such as a doctor, only has occasional calls by his clients or patients at his home, no expense can be claimed for rent, heat, or depreciation. If an automobile is used exclusively in the pursuit of his profession, the entire amount of operating expense of such automobile, plus depreciation, may be taken. If the automobile is used partly for business and partly for pleasure, the portion of the upkeep and depreciation applicable



Will H. Smith

to business may be deducted as business expense.

Office equipment is depreciable, but cost of small instruments with a normal life of a year or less should be recovered as an expense.

**EXPENSES:** Expenses of a professional man in securing admission to practice his profession are considered capital expenditures and may not be deducted. Membership in medical or technical societies, trade associations, etc., used as a means of advancing the business interests of the taxpayer, and dues paid to such organizations are deductible as a business expense, but dues paid by professional men for membership in social or athletic clubs would not be deductible. However, tax paid on club dues is an allowable deduction, even though the dues are not deductible. Subscriptions to technical magazines and trade journals used in furthering business interests are allowable as business expense.

Railroad fare and hotel bills incurred by a doctor attending a medical convention are a deductible business expense. Expenses of a physician taking a post-graduate course are personal expenses and are not allowed as business expense.

*Under the Revenue Act of 1935, there must be included in income recovered by insurance annuities for each taxable year, three per cent of the cost of such annuities.*

#### FORMS

Income tax returns of professional men should be made on Form 1040, regardless of the amount of income. Blanks have been mailed to all taxpayers of record, and inasmuch as a supply of forms deemed sufficient to meet only the actual needs has been allotted to this district, taxpayers are urged to use those blanks received; however, if blanks have not been received, they will be supplied upon application to this office, together with any advice or assistance that might be needed. Taxpayers not of record are urged to figure carefully their net and gross income to determine if they are liable for filing.

#### RETURNS MUST BE FILED BY MARCH 15, 1936

Although March 15 is the deadline for filing, taxpayers are urged to file their returns as early as possible to avoid delinquency and the resulting penalties.

A green duplicate sheet has been mailed with each return. This must be completed and filed with the return. The 1935 Law specifies that *all returns must be filed in duplicate.*

## SECRETARIES' COLUMN

The new idea being advanced by the Indiana State Medical Association for the exchange of speakers between county societies on the subjects of cardiovascular and neoplastic diseases is a good one.

Several new ideas are "out" on the diagnosis and treatment of heart disease, and they need to be emphasized. There are several cardiovascular conditions that need to be thought about. These conditions are becoming too frequent. There are too many young people "going West" from heart disease. The same thing may be said of the neoplastic diseases.

There are many subjects upon which an exchange of speakers would be beneficial; ask to have them presented to your own society.

Have you collected the dues from all your members? Remember that this will be an important year in medical affairs. You should try to have every eligible doctor in your county a member of your society.

Has your society been helping the high school debate teams on the question of state medicine? If not, lend them your aid. You can help to put the question fairly to the people.

A recent suggestion in a newspaper is to the effect that the legal profession might be socialized. This is a phase of the subject that should interest the medical profession.

There also has appeared in the paper an advertisement for an industrial physician, not over thirty-five years of age, to do "research in health maintenance; potential opportunity to assume responsibility for direction of a comprehensive medical program." If this position falls into the hands of a physician who has a conscience, all well and good, but if it doesn't, what a disrupting factor it could be! After reading this ad, the thought occurred that the medical schools should teach more medical economics and ethics than they have up to the present time.

DUES ARE PAST DUE NOW. DELINQUENCY BEGINS FEBRUARY FIRST.



Chairman.

## **MATERIAL FOR DEBATERS**

Hundreds of Indiana high school students will participate in debates within the next few weeks on the subject: "Resolved, That the several states should enact legislation providing for a system of complete medical service available to all citizens at public expense." Final debates will be held at North Manchester, April 3 and 4.

Some of our members have been asked for help by student debaters, and have given the information they had at hand; others have availed themselves of the data supplied by the headquarters office of the Indiana State Medical Association. Sets of pamphlets have been sent to each county medical society secretary and to each high school debating coach. The Bureau of Publicity sent a release to newspapers, advising that information would be sent to students who requested it. The material contained in each set of pamphlets included the following.:

- (1) Group Hospitalization Contracts Are Insurance Contracts; (2) Income from Medical Practice; (3) Net Incomes from Medical Practice (supplementary report); (4) Health Insurance in England and Medical Society Plans in the United States; (5) Prepayment Plans for Hospital Care; (6) An Introduction to Medical Economics; (7) The Costs of Medical Education (Students' Expenditures); (8) Group Practice; (9) Contract Practice; (10) New Forms of Medical Practice; (11) Radio Debate on State Medicine; (12) Handbook of Sickness Insurance, State Medicine, and the Cost of Medical Care; (13) Sick-

ness Insurance Catechism; (14) Sickness Insurance Not the Remedy; (15) Some Defects in Insurance Propaganda; (16) A Critical Analysis of Sickness Insurance.

This material was prepared and supplied by the Bureau of Medical Economics of the American

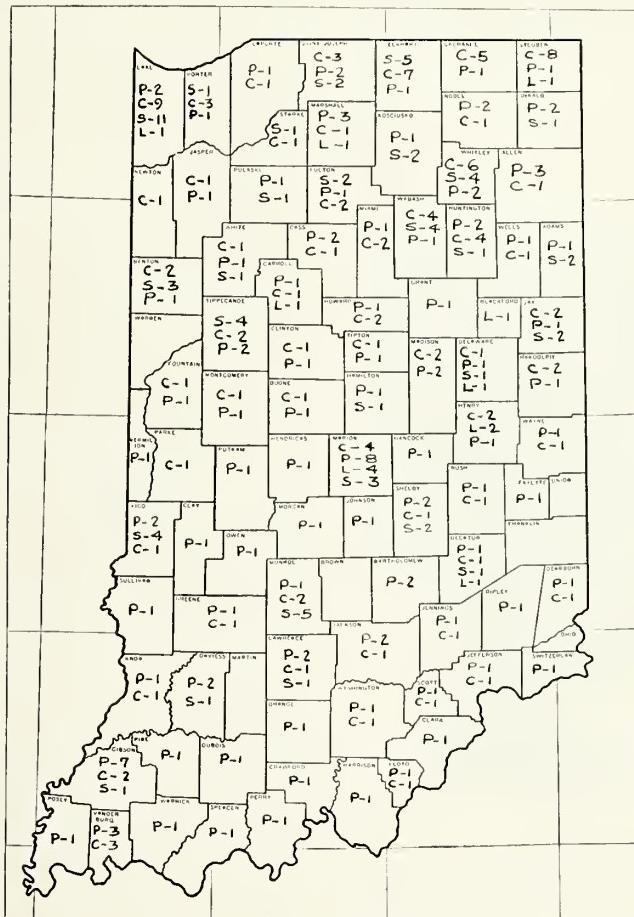
Medical Association. Recently we have purchased a supply of pamphlets from the State Medical Society of Wisconsin and the Minnesota State Medical Association for similar distribution.

If a student asks your help in procuring data on this subject, give him your assistance. The material outlined will be sent without cost upon request.

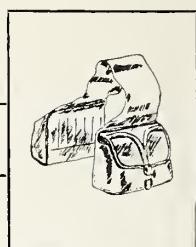
The accompanying map shows the distribution of this material in Indiana now.

We have received reports from several high schools to the effect that there will be no debates on the subject. Some superintendents of schools apparently feel that the topic is of such a nature that it would be very difficult of comprehension by an adult mind, and much less possible to receive

prudent deliberation at the hands of high school students. As a matter of fact, the greatest difficulty that has been encountered by the physicians in putting forward their side of the question has been one of simplification. Vast amounts of material are available upon the subject, but those in charge of the matter have attempted to put forward this material in simple, understandable form. When you talk to any of the student debaters, make every effort to discuss the subject that way.



Distribution of material in Indiana concerning socialized medicine. Sets of material mentioned in accompanying article sent to: P, physicians; C, coaches; S, students; L, laymen.



## Indiana Medicine in Retrospect

L. C. ZERFAS, M.D.  
Historian, Indiana State Medical Association

### MILKSICKNESS AND THE LINCOLN FAMILY

Recently there has been published a book<sup>1</sup> written by Hans Zinnser, Professor of Bacteriology at Harvard University Medical School, entitled *Rats, Lice and History*, which, as the title indicates, reveals the relationship of various epidemic diseases and their carriers upon civilization. Similarly, milksickness, one of the most dreaded diseases in the Central West, occurred endemically throughout this region with such devastating effects that it influenced and changed the course of events in



Abraham Lincoln

our own state. Entire communities were erased by death or the pioneer settlers removed because of fear and economic losses.<sup>2</sup> The disease occurred chiefly along the lowlands and watercourses as a rule, though it might be found in any section, even in mountainous areas, as those of North Carolina, Tennessee, and Southwest Virginia.

A letter written by Benjamin F. Russell, from Newport, Vermillion County, Indiana, July 5, 1841,<sup>3</sup> states that he was well pleased with their new location but that it was infected with "milk-sick" which broke out in May. He states further that there were "fearful ravages among both man and beast, heare (here) we are restricted to a very

limited variety of food as we dare not use milk buttor (butter) cheese (cheese) beef mutton no fresh pork and in fact we run some risk in using even bacon of them, and moore (more) than all this springs and wells become spontaneously poison and destroy whole families together with their stock. This is not (an) exaggerated picture indeed it fawls (falls) short of the reality it (is) ten fold worse than cholera it extends from the head to the mouth of the Wabash river and extends fair (far) into the country on either side of the river an average extent in width of one hundred miles with heare (here) and theare (there) a small extent of country that is exempt by spells. This is two (too) bad I cannot stand it to expose my family thus. I intend to leave this country . . . ."

Examination of the collected data shows also that the disease occurred along the Ohio river and indeed might be found in isolated areas anywhere in the state. The disease was known by a variety of different names in the language of the pioneers, as sick stomach, swamp sickness, tires, trembles, slows, stiff joints, puking fever, river sickness, buzzard's disease, etc.

Drake says, "Its prominent symptoms are, a vomiting upon taking exercise, with chronic debility, lassitude and soreness of the extremities"<sup>4</sup> "When the individual is about to be taken down, he feels weary, trembles more or less under exertion, and often experiences pain, numbness and slight cramps in the calves and other muscles of his legs. At the same time, he becomes constive; and, under fatigue, is likely to experience a slight degree of nausea. His appetite is not generally impaired, but he has a feeling of depression and burning, at the pit of the stomach. He is irresolute, and as much indisposed to mental as to bodily effort. He may continue in this situation for a while and recover spontaneously, or by a single cathartic; but more commonly under the unfluence of an exciting cause, severe symptoms supervene."<sup>5</sup>

While there was much speculation as to the cause of the malady, it is now definitely known to be due to a poisonous yellow viscous oil, trematol,

<sup>1</sup> Daniel Drake, M. D., *Natural and Statistical View of Pictures of Cincinnati and the Miami Country*. Looker and Wallace, Cincinnati, 1815, p. 182.

<sup>2</sup> Daniel Drake, M. D., *A Memoir on the Diseases Called by the people "Trembles," and the "Sick-Stomach" or "Milksickness," as they have occurred in the counties of Fayette, Madison, Clark and Greene in the State of Ohio*. The Western Journal of Medicine and Surgery, March, 1841, Vol. III, p. 176.

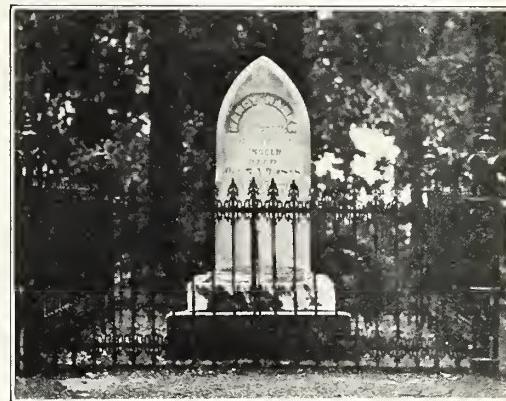
<sup>3</sup> Published February, 1935, by Little, Brown & Co., Boston.  
<sup>2</sup> George B. Graff, M. D., *On the Milk Sickness of the West*. The American Journal of Medical Sciences, n. s. Vol. I, Article V. Philadelphia, Lea & Blanchard. 1841, p. 352.

<sup>3</sup> English Collection, State Library.

found in the white snakeroot weed (*Eupatorium urticaefolium*), and in certain other poisonous weeds. When the weed was eaten by cattle, the milk, butter, cheese, and flesh of the animal was found to be fatal when eaten even in small amounts. Often the disease remained in a latent state during the life of the animals and not recognizable even after death.<sup>6</sup> Such meat when eaten was capable of producing the disease in both man and animals. In a historical review by Couch,<sup>7</sup> he states that "among the many perils and hardships that marked the early settlement of the old frontier of the United States was the mysterious malady known as 'milk sickness'. . . . So recondite its cause, so unavailing were the preventative measures taken by the terrified backwoodsmen, and so fatal were the attacks, that the old chroniclers refer to it in the strongest terms as formidable, terrible and frightful."

Abraham Lincoln became a Hoosier in his eighth year. "We reached our new home," he said in his autobiography, "about the time the state came into the Union" (1816).<sup>8</sup> The new home, as is well known, was located in Spencer County, then a part of Warrick, about sixteen miles north of the river. Lockridge states that there were only seven families who lived in that section when the Lincolns came, but others kept coming. Beveridge, in his life of Lincoln,<sup>9</sup> states that in the autumn of 1818 a disease, mysterious as forest shadows, came suddenly upon Pigeon Creek. The nearest physician lived about thirty miles from the settlement. "Betsy and Thomas Sparrow, who were known in the settlement as 'Mrs. Lincoln's father and mother,' were stricken in the half-faced camp and there on skins and leaves covering the ground they died, about eighteen months after their coming. . . . To the sick old man and woman Nancy Lincoln had given all the help she could; she had visited, in her last illness, the wife of Peter Brooner, a hunter chiefly, whose cabin was only half a mile away. Mrs. Brooner died, too; and at the same time Nancy Lincoln fell sick. Neighbors attended her and one of them, William Wood, recalls that he 'sat up with her all one night.' Thus," states Beveridge, "she struggled on for a week; and at the last, calling Sarah and Abraham to her side, told them to be good to their father, to each

other, and to reverence God. She died in October, 1818, on the seventh day of her illness." Shutes says, <sup>10</sup> "Her end was possibly hastened by the blood-letting proclivities of Josiah Crawford on that poor body already dehydrated by the disease." "Thomas Lincoln made a coffin for his wife, whipsawing the planks for it out of a log that was unused in the building of their cabin. A broken-hearted son whittled with his jackknife the pins that were used to fasten the lumber together for the last rude earthly home his mother was to know. There were no funeral services held for Nancy Lincoln. Kind neighbors came and laid her to rest . . . ." states Vannest.<sup>11</sup> Thus in the forests of southern Indiana occurred a tragedy in the life of Abraham Lincoln which must have made a lasting imprint upon an impressionable mind.



Grave of Nancy Hanks Lincoln, Spencer County, Ind. (Courtesy of the Indiana State Department of Conservation.)

Milksickness continued to occur sporadically during the ensuing years in the Pigeon Creek settlement, and finally in the autumn of 1829, Thomas Lincoln resolved to leave Indiana for Illinois, settling in Macon County. "The Reson," (Dennis Hanks wrote to William H. Herndon, March 7, 1866, for leaving Indiana), "is this we war perplexed By a Disease cal'd Milk Sick my Self Being the oldest I was Determined to Leve and hunt a Cuntry whare the milk was not I maried his oldest Step Daughter I Sold out and they concluded to gow with me. . . . My wif's mother could not think of parting with her and we Riped up Stakes and Started to Illinois."<sup>12</sup>

Aside from these definite and direct effects of milksickness upon the Lincoln family, only speculation and conjecture can be employed to trace its effects upon the life of Abraham Lincoln and subsequent historical events of the state and nation.

<sup>6</sup> James Fitton Couch, Trembles (or Milk Sickness). Circular No. 306, Nov., 1933, United States Department of Agriculture, Washington, D. C. Also Couch, Tremetol, the Compound that Produces "Trembles" (Milksickness). Journal of the American Chemical Society, 51, 3617 (1929).

<sup>7</sup> James Fitton Couch, The Toxic Constituent of Richweed or White Snakeroot (*Eupatorium urticaefolium*). Journal of Agricultural Research, vol. 35, No. 6, Washington, D. C., Sept. 15, 1927, p. 547.

<sup>8</sup> Ross F. Lockridge, A. Lincoln. World Book Company, Yonkers-on-Hudson, N. Y., 1930, p. 27.

<sup>9</sup> Albert J. Beveridge, Abraham Lincoln. Houghton Mifflin Company, Boston, 1928. Vol. I, pp. 47-48.

<sup>10</sup> Milton H. Shutes, Lincoln and the Doctors. The Pioneer Press, N. Y., 1933, p. 4.

<sup>11</sup> Charles Garret Vannest: Lincoln, the Hoosier. Eden Publishing House, St. Louis, 1928, p. 23.

<sup>12</sup> Beveridge, Abraham Lincoln, p. 95.

## THE PRESIDENT'S PAGE

### SECRETARIES AND OTHER MEMBERS

Just at what time in medical organization secretaries evolved from the limited duties of keepers of the minutes and custodians of the official seal into general directors of activities of medical societies is not clearly marked. This evolution seems, however, to have been necessary and indisputably beneficial. Perhaps one of the most important of the activities of secretaries is that of a "continuity director." More than any other officer he is responsible for continuing unbroken those threads of activity which constitute the warp of medical organization. Woven into the pattern enter balanced portions of the science, art, ethics, and business of the practice of medicine.

But societies are made up of men, each with his individual personality. To every one of these, separately, the secretary becomes the agent of liaison, and the attitude, interest, and effective activity of members may be an index to the measure of understanding, planning, and energy devoted to his task by a faithful secretary.

Two dangers, however, arise in the affairs of many societies: (1) an uninterested membership may do nothing and permit all the burden of society activities to fall upon the overworked secretary; or (2) the secretary may tire of his efforts to arouse sufficient interest and activity among the members and may yield to the less fatiguing plan of doing it all himself. Both conditions are harmful. Medicine, today more than at any other time in history, needs the interest and effort of each physician, and each physician needs, to an even greater degree, the protection and planned activity made possible only by organization. Interest and activity are necessary to informed leadership, and the secretary should encourage the development of such leadership.

### PROGRAMS

Scientific programs are of no less importance than organization interests. Medical leadership includes scientific attainments, trained observation, and ability to report the results of these studies in prepared articles and before medical groups. This ability is acquired only through repeated efforts. The literature of current developments in the science of medicine is available to the most remote points, for a few cents postage needed in obtaining loan packages from the library of the American Medical Association. The understandable description of a few cases, based on careful

observation, with a summary of current literature on the particular subject, may be of greater value to the speaker and his auditors than the generalities of a broader presentation by a more practiced individual. Aside from climatic diseases and occasional epidemics or other causes of concentration, a cross-section of disease incidence shows much the same distribution in all communities. Outstanding clinical observations have been made by general practitioners and there are still questions to be solved. For the benefit of county societies, a substantial portion of medical programs should be provided by the membership. The occasional speaker of unusual training or experience, invited from outside the county, then offers a valuable additional contribution in medical information and stimulation to local efforts.

### IMPORTANCE OF COUNTY SOCIETY AND SECRETARY

It must be borne in mind that the county society is the unit upon which is founded the entire structure of medical organization, and the strength of the whole depends upon the aggregate of its county units. Of these, the secretary is the key-man. The Conference of County Secretaries offers the opportunity for acquainting the officers with many of the problems confronting medicine—social security plans, medical economics, graduate education, indigent relief, legislative proposals, public health, medical ethics, and the myriad problems of state and county societies. The future of every individual physician will be to some degree, at least, influenced by the factors discussed. All officers and members are therefore urged to attend these conferences of secretaries.

Presidents and committeemen and that group of dependable members who furnish support to all worthwhile medical activities must also be recognized in any appraisal of medical organization and medical matters. To them, our respect and appreciation is due. But this letter is about secretaries—whom we take for granted but hold in high regard.

### DUES

Speaking to secretaries and other members—dues are due. Your Association medical defense privileges are not in effect after February 1 if your dues are not paid.

*R. L. Dennerick*

## DIPHTHERIA DEATHS IN INDIANA FOR DECEMBER, 1935, AND FOR THE YEAR 1935

Twenty-seven deaths from diphtheria for the month of December, 1935, and five delayed reported for previous months, brings the total number of deaths for the year to 137. This is an extremely familiar number in this connection, because it is the same as the total number for 1930 and also for 1931. Only one year has ever been below that figure in Indiana, which was during the year of 1934 when there were 120 deaths. This gives a rate for the year of 1935 of 4.1 for the state, which is entirely too high. The highest rate for any county was Jennings, with six deaths, with a rate of 50.8. Next is Brown County with a rate of 38.6. After this comes Jackson County with a rate of 37.9, as occasioned by nine deaths. Monroe County has a rate of 21.1. It will be noted from this that the heaviest incidence of the disease is in the south central counties.

The age distribution for the December deaths is interesting. There were four adult deaths; eight school children (three of whom were six years of age); and fifteen in the pre-school age group. The conclusions to be drawn from these facts are rather obvious.

A list of the counties of the state, giving the number of deaths for the month of December, 1935, for the year of 1935, and the rates for the year of 1935, is given below:

County	Total December 1935	Total for 1935	Rate for 1935 per 100,000 Pop.
Adams	1	1	5.0
Allen	0	9	5.9
Bartholomew	2	4	16.0
Benton	0	0	0
Blackford	0	1	7.3
Boone	0	2	8.9
Brown	0	2	38.6
Carroll	0	0	0
Cass	0	0	0
Clark	0	1	3.2
Clinton	0	1	3.6
Crawford	0	1	9.8
Daviess	1	1	3.9
Dearborn	0	2	9.4
Decatur	0	0	0
DeKalb	0	1	4.0
Delaware	0	1	1.4
Dubois	0	0	0
Elkhart	0	2	2.8
Fayette	0	2	10.2
Floyd	0	0	0
Fountain	1	2	11.1
Franklin	1	1	6.8
Fulton	0	0	0
Gibson	1	1	3.4
Grant	0	2	3.9
Greene	0	0	0
Hamilton	0	0	0
Hancock	0	0	0

County	December 1935	Total for 1935	Rate for 1935 per 100,000 Pop.
Harrison	0	1	5.7
Hendricks	0	0	0
Henry	0	0	0
Howard	4	6	12.6
Huntington	0	0	0
Jackson	1	9	37.9
Jasper	0	1	7.4
Jay	0	0	0
Jefferson	0	3	15.6
Jennings	3	6	50.8
Johnson	0	1	4.5
Knox	0	2	4.5
Kosciusko	0	0	0
LaGrange	0	0	0
Lake	0	3	1.0
LaPorte	0	2	3.2
Lawrence	1	5	13.3
Madison	0	1	1.1
Marion	3	23	5.2
Marshall	0	0	0
Martin	0	2	19.7
Monroe	2	8	21.1
Montgomery	0	1	3.7
Morgan	0	0	0
Newton	0	0	0
Noble	0	0	0
Ohio	0	0	0
Orange	0	0	0
Owen	1	1	8.7
Parke	0	0	0
Perry	0	0	0
Pike	0	3	18.3
Porter	0	1	4.2
Posey	0	0	0
Pulaski	0	0	0
Putnam	0	0	0
Randolph	0	0	0
Ripley	1	1	1.5
Rush	0	0	0
Scott	0	0	0
Shelby	0	0	0
Spencer	1	2	11.9
Starke	0	0	0
Steuben	0	1	7.4
St. Joseph	3	8	4.7
Sullivan	0	1	3.5
Switzerland	0	0	0
Tippecanoe	0	2	4.1
Tipton	0	0	0
Union	0	1	1.7
Vanderburgh	0	0	0
Vermillion	0	0	0
Vigo	0	1	1.0
Wabash	0	0	0
Warren	0	1	10.9
Warrick	0	1	5.4
Washington	0	0	0
Wayne	0	2	3.5
Wells	0	0	0
White	0	0	0
Whitley	0	0	0
Total	27	137	4.1

Committee on Diphtheria Prevention,

TURMAN B. RICE, M. D., Chairman.



## Under the Capitol Dome

### STATE BOARD ELECTION

The State Board of Medical Registration and Examination re-elected all its officers at the annual meeting in January. The officers are: J. W. Bowers, M.D., Fort Wayne, president; Leslie C. Sammons, M.D., Shelbyville, vice-president; William R. Davidson, M.D., Evansville, secretary; and Cecil J. Van Tilburg, D. C., Indianapolis, treasurer. Other members of the Board are E. O. Peterson, D.C., LaPorte; N. E. Harold, M.D., Indianapolis; and F. S. Crockett, M.D., Lafayette.

### REPORTING FORMS FOR PUBLIC HEALTH WORK

Dr. Verne K. Harvey, director of the Indiana State Department of Public Health, recently attended a conference in Washington at which a uniform reporting form for evaluating general public health work was drafted. Dr. Harvey is a member of a committee appointed by the Surgeon General to work out the forms. Conference was held in the offices of the Surgeon General.

The forms will be used in the states and by the U. S. Public Health Service, but they will not be used until after July 1, this year, Dr. Harvey said. Each county will send in uniform reports to the state health department and the state, in turn, will make its report to the Federal health department. It will include all branches of public health activities.

The prime purpose of this uniform system of reporting is to keep the Federal government in touch with activities of the state in connection with the national health work that is part of the government's social program. Indiana will receive about \$150,000 a year from the government for this work.

There is no uniform system of reporting at the present time, Dr. Harvey said. The recently drafted forms will include reports on every activity of public health work, including communicable diseases, tuberculosis and venereal disease control, public health education, public health nursing, environmental sanitation such as water, milk, housing and sewage disposal.

Dr. Harvey said that very little, if any, legislation will be needed to permit Indiana to take part in the Federal government's program. No additional appropriation will be needed for the state department at this time, he said.

Each state, under the Federal program, will set up a system most applicable to its particular needs, and the state will be responsible to the U. S. Public Health Service.

## VOICE OF MEDICINE

### MEDICAL STUDENT OBJECTS TO NEW MEDICAL BUILDING AT BLOOMINGTON

#### To the Editor:

I noted with pleasure the practically completed plans for a new medical school, for Indiana University, which were announced in the press recently. It is encouraging to know that medical education will be able to profit from the governmental building program. However, it seems to me that the men who formulated the plans have forgotten to look forward to future developments of Indiana medical education in arranging for the building addition in Bloomington rather than in Indianapolis.

As a medical student I feel that I am not alone in desiring to see the medical center in Indianapolis, which is rapidly becoming one of the most important of such centers in the nation, as the single institution for training in medicine associated with the state university. From this standpoint I should like to point out a few obvious advantages of such an arrangement.

One of the arguments given for the Bloomington division is that many students entering medicine are barely three years out of high school and that a third year on the mother campus would serve to acclimate them to university training. It should be remembered that already a three-year pre-medical course is to be required and it follows that four years training will probably come in the near future. In such case it seems odd to keep students in Bloomington, out of touch with medical traditions, for four or five years. With practically the same pre-professional requirements for entrance, the dental school of the university holds classes for all four years training at the Medical Center. Because of the nature of their studies, freshmen medical students even now are not very closely associated with campus life at Bloomington and the opportunity to get acquainted with the men who would eventually teach them at Indianapolis seems to more than compensate for the other disadvantage.

It is well known that upperclassmen away from their work in anatomy and physiology soon become rusty in the fundamental subjects. The various upperclassman courses in these divisions should be logically under the direction of the men who are most closely associated with these fields. Anatomical material can be obtained at the Indianapolis school but it is rather difficult to demonstrate since facilities are not very good at the present time. It seems that all four classes should be entitled to the counsel of the teachers of these basic courses, which is at present practically limited to those students in the first year of medicine.

I believe I am correct in saying that a committee

on medical education some time ago reported that it had come to the conclusion that a single institution would be best for medical teaching. At the present time only four other schools besides Indiana University have their training in two cities. The University of California has schools in Berkeley and San Francisco, the College of Medical Evangelists in Loma Linda and Los Angeles, California; the University of Kansas School of Medicine in Lawrence and Kansas City, and Cornell University in Ithaca and New York City, with the first year offered at both places. All of the other Class A medical schools are confined to one city.

In conclusion, it may be said that there seems to be no obvious reason for keeping the schools separated. Why not build the new addition on ground already in the possession of Indiana University at the Medical Center rather than prolonging the separation which offers no advantages?

A MEDICAL STUDENT

#### REPLY TO THE AMERICAN FOUNDATION

In replying to the questionnaire sent to some physicians by the American Foundation, Dr. Burton D. Myers of Bloomington has sent such a worthwhile letter that the editor asked permission to publish it, as follows:

Dear Sirs:

I have at hand your letter of December 2 and wish to compliment you on the fairness of your inquiry.

Your letter is written to me as a practitioner. I have never practiced medicine but I have been associated with the amalgamation of five old medical schools at the beginning of this century, into the Indiana University School of Medicine, and the development of the I. U. School of Medicine into a plant which had no equivalent in the United States at the beginning of the century, except for Hopkins, Harvard, and Pennsylvania. During that time I have seen some marvelously fine things happen.

A doctor friend, now dead, stated to me that it cost him \$1,500 a year to help wipe out typhoid fever; yet neither he nor any other members of the medical profession that I have ever contacted hesitated a moment in doing everything within his power to wipe out that disease, although doing so affected him directly economically and seriously, considering the average income of the doctor of medicine. I speak of typhoid fever, but the attitude of the medical profession is the same with reference to all diseases. The same spirit still holds in the medical profession.

The number of years of collegiate work required for entrance on the study of medicine has increased. Only one student in six in the United States in 1933, entered on the study of medicine with as little as two years of collegiate work.

The cost of medical education has greatly in-

creased, until, even in state universities where tuition is supposed to be free or very low, the medical fees are \$200 or more per year, while in some of the proprietary schools the fees are as much as \$600 per year. It is estimated that the actual outlay in cash which must be made by a man who pays all his way through pre-medical courses, the four years of the medical course, and the intern years following, is between \$15,000 to \$20,000. Please bear in mind that the average age of these men at graduation from medical school is 27 years. Even then the young doctor is not ready to practice, but must spend from one to five or more years in postgraduate intern work before he begins his practice.

Under separate cover I am sending you a study which I made of applications for matriculation in medical schools, covering a period of four years, 1926-1930. You will observe that in 1929-30, 6,600 men were refused matriculation in medical schools and just about the same number were accepted. The number accepted given in the study is 7,035 but certain of these men were accepted in two schools and the actual enrollment in medical schools that year was around 6,500. I discontinued the study, which two years later was taken up by the Association of American Medical Colleges and has been continued since by that Association, and the figures run essentially the same as in 1929-30. The interpretation of these figures is that medicine is the most highly competitive field of instruction in any university these days.

Fifty per cent of those who apply for matriculation in medical schools, after two or three years or more of collegiate work, are accepted. Statistics over a period of 30 years show that 25 per cent of those who are accepted in medical schools never succeeded in graduating. This means that 37½ per cent of those who apply for matriculation in medical schools ultimately succeed in becoming doctors of medicine.

When schools have the opportunity of so carefully selecting their men, and when men know that they must compete with other men for a place in a medical class, the result is a superior type of medical student that makes possible a superior type of instruction and calls for superior accomplishment, etc.

Now all of these things, in my judgment, are possible only so long as in the field of medicine there is the opportunity for individual initiative.

There were in 1905, 165 medical schools in the United States. Today there are less than 80 and these 80 have physical plants, equipment, and trained staffs that on the whole, are vastly superior to those of the beginning of this century and the equal of any in the world.

I happen to be a member of the State Planning Board of Indiana. I have seen some very unexpected results follow on the best intentioned plans. There was in northwestern Indiana, 50 years ago,

a marshy district drained by the Kankakee River. Because it could not be cultivated it was looked upon as waste, in spite of the fact that it was one of the finest conceivable retreats for game birds of all kinds. It seemed so obvious that it would be profitable to drain this region and bring it under cultivation that a deep drainage canal was dug. The unexpected and alarming result is that, now after a lapse of years during which time the ground water level has gradually fallen, there is fear that if this fall continues, as seems probable, this area will be lost to agriculture. Already lost as a game preserve, if lost to agriculture, it will become a real waste region.

Everyone has been pleased with the marvelous medical developments of the last 50 years and gratified with the increased average life rate. But this medical development has been applied to the unfit as well as to the fit so that today, while we have a great problem of the unemployed, we have the growing problem and menace of the unemployable, and we have the problem of care of old and destitute people, the problem of rapid breeding from mediocrity, etc.

I believe that an impartial study of medical education will show a development unexcelled in any educational field. While it does not necessarily follow, I think it entirely possible, if not probable, that experimentation along some of the lines being proposed today, may have very unexpected and disastrous results. I believe there is evidence based on experience in European countries that justifies this view.

Very truly yours,  
 B. D. MYERS, M. D., Dean,  
 I. U. School of Medicine,  
 Bloomington, Ind.

#### SHOULD A YOUNG MAN STUDY MEDICINE?

Recently an Indiana physician was asked by a minister whose son wished to study medicine, "Would you advise a young man to take up the study of medicine today?" The question was referred to Dr. Olin West, secretary of the American Medical Association, whose reply follows:

My Dear Sir:

Mr. T. A. Hendricks, Executive Secretary of the Indiana State Medical Association, has forwarded to me a copy of a letter that you addressed to him under date of January 7 and has asked me to reply.

I can offer you nothing more than my purely personal views concerning the questions raised in your letter. I am quite sure that others would express views of an entirely different nature.

In my opinion the question as to whether or not a young man should enter into the study of medicine with a view to becoming a practicing physician is one that in the last analysis can be answered by the young man himself. I would strongly advise him to seek another career unless he has given the matter the utmost consideration and is very sure in his own mind that he is willing

to undergo several years of arduous effort in training; unless he knows that he is actually and very earnestly interested in scientific medicine; unless he is quite willing to serve the public on a strictly professional basis with financial reward a secondary consideration, and unless he is in a position to carry himself through an indeterminate period of lean years after he has secured the necessary training.

You know, of course, that the cost of medical training, involving four or five years in medical school and hospital service, is large, and in most instances it is true that young physicians have difficulty in the beginning of their practice in securing an income large enough to enable them to stand on their feet financially. It is my purely personal opinion that a young man who is compelled to go heavily into debt in order to secure the necessary professional training assumes at once a burden that will make it difficult for him to do his best work while he is actually taking his training. I have grave doubts that it is wise for a young man to attempt to become a physician if he must be harassed by the consciousness of a burden of debt during the time that he is trying to prepare himself for practice.

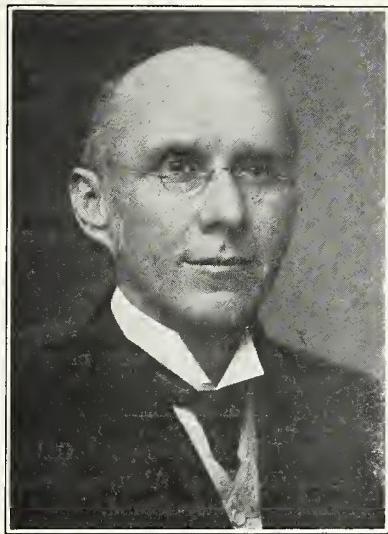
On the other hand, I am quite convinced that any intelligent young man, who is imbued with professional ideals, who believes in scientific medicine and earnestly desires to render worthy service in the interest of humanity, who diligently applies himself to secure a comprehensive basic knowledge of medicine and of its possibilities and limitations, who is in position to withstand the effects of a few lean years and who will be available when his services are wanted, can make a success in the practice of medicine. Professional ambition, determination, integrity and diligence are necessary qualifications, in addition to a knowledge of medicine itself. The most successful physicians are men of personality who have deep human sympathy and who are able to develop the proper understanding of human nature, which means that they must be so qualified as to be able to learn how to deal with other human beings.

While commercialism has no place in the practice of medicine, it is nevertheless necessary that a physician, in order that he may be in position to render the best service of which he is capable, have an income adequate to meet the reasonable demands of fair comfort in living conditions and in affording proper care and safety for his dependents. For that reason, a physician should have some knowledge of business affairs and some understanding of economics.

The general subject under discussion is one which lends itself to prolonged consideration and comment. I regret that because of a tremendous pressure of work I do not have the time necessary to enter into a thorough discussion.

Very truly yours,  
 OLIN WEST, M. D.

## DEATH NOTICES



George W. McCaskey

**GEORGE WASHINGTON MCCASKEY, M.D.**, prominent retired Fort Wayne physician, and past president of the Indiana State Medical Association, died December thirtieth, after a long illness. He was eighty-two years of age.

Dr. McCaskey started practice in Fort Wayne in 1882, and became an outstanding diagnostician and was nationally known as an authority on diseases of the stomach. He served as professor of theory and practice of medicine in the old Fort Wayne Medical College, and was professor emeritus in medicine in the Indiana University School of Medicine in Indianapolis.

His contributions to medical literature have been numerous, and included seventeen original scientific articles published in this magazine between the years 1908 and 1926. In 1910, Dr. McCaskey addressed the International Medical Congress at Madrid, Spain.

Dr. McCaskey was a past president of the Northern Tri-State Medical Society, of which he was one of the founders, and served as president of the Indiana State Medical Association in 1901. He maintained memberships in the Fort Wayne Medical Society (honorary), the Indiana State Medical Association (honorary), the American Medical Association, the American Gastro-Enterological Association, and the American College of Physicians. He was a graduate of the Jefferson Medical College, Philadelphia, in 1877.

**MAURICE I. ROSENTHAL, M.D.**, of Fort Wayne, died December twenty-fourth, aged sixty-six years.

Dr. Rosenthal was an authority in the treatment of cancer, and had been a leading surgeon in Fort Wayne for the past forty years. After graduating

from the Medical College of Ohio, Cincinnati, in 1890, he studied at the Kaiser Wilhelm University in Berlin and at the University of Prague in Bohemia.

Dr. Rosenthal was instrumental in building up the St. Joseph Hospital of Fort Wayne, and served as chief of its staff from the time the staff was organized until two years ago. He served as a captain in the medical corps of the United States Army during the World War.

Dr. Rosenthal was a member of the Fort Wayne Medical Society, the Indiana State Medical Association, the American Medical Association, the American College of Surgeons, the American Radium Society, and the American Association of Obstetricians, Gynecologists, and Abdominal Surgeons.

**BUDD VAN SWERINGEN, M.D.**, of Fort Wayne, died December eighteenth, aged sixty-eight years. He had practiced in Fort Wayne for a period of forty-seven years. He was councilor to the Indiana State Medical Association from the twelfth district from 1923 to 1928, inclusive.

Dr. Van Sweringen served as an instructor in the Fort Wayne College of Medicine, and for many years was active politically, serving as city councilman, during which service he introduced the first "safe and sane Fourth of July" ordinance in Fort Wayne which, amended from time to time, still stands as a monument to its author. During the World War, Dr. Van Sweringen carried the rank of major in the medical corps of the United States Army and served in various camps in this country.

Dr. Van Sweringen graduated from the University of Pennsylvania School of Medicine, Philadelphia, in 1888. He was a member of the Fort Wayne Medical Society, the Indiana State Medical Association, and a Fellow of the American Medical Association.

**GEORGE B. M. BOWER, M.D.**, of Fort Wayne, died December twenty-eighth, aged seventy-three years. Dr. Bower served as president, secretary, and a member of the Board of Censors of the Fort Wayne Medical Society. He had retired from active practice several years ago.

Dr. Bower graduated from the University of Maryland School of Medicine and College of Physicians and Surgeons, Baltimore, in 1862. He was an honorary member of the Fort Wayne Medical Society, and for fourteen years prior to his retirement he had maintained membership in the Indiana State Medical Association and the American Medical Association.

**MALACHI R. FRENCH, M.D.**, of Evansville, died January seventh, aged seventy-seven years. Dr. French had retired from active practice about three years ago. He graduated from the Pulte Medical College, Cincinnati, in 1880.

EMIL O. KRUEGER, M.D., of Michigan City, died December twenty-third, aged fifty years.

Dr. Krueger graduated from the University of Michigan Medical School, Ann Arbor, in 1908, and was a member of the LaPorte County Medical Society, the Indiana State Medical Association, and the American Medical Association

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P. NORMAN SUTHERLAND, M.D., of Angola, died December twenty-eighth, aged sixty-five years. Dr. Sutherland had been secretary of the Angola board of health since 1906. He graduated from the Wayne University College of Medicine, Detroit, in 1896, and was a member of the Steuben County Medical Society, the Indiana State Medical Association, and a Fellow of the American Medical Association.

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MELVILLE FREEMAN JOHNSTON, M.D., of Richmond, died December twenty-ninth, aged seventy-seven years. Dr. Johnston died in his automobile while enroute to visit a sick child.

Dr. Johnston was twice president of the Wayne-Union County Medical Society, and had served as city health officer and as county health officer for a number of years.

Dr. Johnston settled in Richmond in 1887, where he had practiced since that date. He was a member of the Reid Memorial Hospital staff from the time of its establishment fourteen years ago. He graduated from the Bellevue Hospital Medical College, New York, in 1886, and was a member of the Wayne-Union County Medical Society, the Indiana State Medical Association, and a Fellow of the American Medical Association.

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FRANKLIN E. RAY, M.D., of Shelbyville, died December eighteenth, aged seventy years. Dr. Ray was a former Shelby County coroner and health officer. He had practiced in Shelbyville since 1901.

Dr. Ray graduated from the Medical College of Indiana, Indianapolis, in 1890, and was a member of the Shelby County Medical Society, the Indiana State Medical Association, and the American Medical Association.

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IRA LECKRONE, M.D., of Silver Lake, died January 15 as the result of an automobile accident which occurred January 14. Dr. Leckrone was made president of the Kosciusko County Medical Society at its December meeting. He was sixty-six years old. He had recently retired from active practice.

Dr. Leckrone was a member of the Kosciusko County Medical Society, the Indiana State Medical Association, and the American Medical Association. He graduated from Rush Medical College, University of Chicago, in 1896.



## HOOSIER NOTES

Dr. W. L. Sharp of Indianapolis, has moved to Anderson where he has offices in the Citizens Bank Building.

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Miss Jean Kramer and Dr. Hubert Gros, both of Delphi, were married October seventeenth in Franklin.

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Miss Kay Craig of Detroit, Michigan, and Dr. John S. Woolery of Bedford, were married December twenty-eighth in Detroit.

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Miss Dorothy Estelle Kelsey of Oakland City, and Dr. Stanley Gordin of Alquina, Indiana, were married December twenty-second.

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Miss Claudia Purkhiser of Indianapolis, and Dr. H. Brooks Smith of Bluffton, were married in Fort Wayne, December thirty-first.

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EDITH HAYNES, Ph.D., lectured on "Bacterial Food Poisoning," January 16, before the Indianapolis Society of Clinical Laboratory Technicians.

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Dr. Arthur Richter has purchased the equipment and practice of the late Dr. T. A. Kearns of Flora.

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DR. L. A. ENSMINGER of Indianapolis attended the meeting of the American Academy of Orthopedic Surgeons in St. Louis, January 13-16.

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Dr. O. G. Brubaker of North Manchester has moved his office from the Perry Building to the Union Trust Building.

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Dr. Nathan P. Colwell, secretary of the council of medical education and hospitals of the American Medical Association for the past twenty-five years, died January sixth.

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The American Bacteriologists' Society will meet in Indianapolis for its annual convention in 1936. The meeting will be held between Christmas and New Year's.

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DR. S. S. FRAZIER of Angola has been appointed secretary of the Angola City Board of Health to succeed the late Dr. P. N. Sutherland. Dr. Sutherland had held the position for more than a quarter of a century.

MR. RAYMOND HERTWIG, secretary of the Committee on Foods of the American Medical Association since the committee's organization in 1930, has become associated with The Borden Company.

Dr. James H. McNeill and family have moved from Paragon to New Castle where Dr. McNeill is serving on the medical staff of the state hospital for epileptics.

Dr. B. R. Kirklin of the Mayo Clinic, formerly of Muncie, Indiana, has been made an honorary fellow of the Royal College of Physicians of England.

Miss Harriett Ford and Dr. Marvin L. McClain of Scottsburg, were married December twenty-first at the home of the bride's parents in Kankakee, Illinois.

Damages estimated at \$25,000 were caused January eighth when fire destroyed the steam power plant at the Wabash Valley Sanitarium near Lafayette.

Dr. H. C. Kraft of Noblesville has received a three-year fellowship in pediatrics at the Mayo Clinic and has gone to Rochester, Minnesota, to reside.

The Indianapolis city central clinics, comprising the infant welfare, dental, and prenatal clinics, have been moved from the Meridian Life Building to the out-patient department of the City Hospital.

The American College of Physicians will meet in Detroit, March 2-6, 1936, for its twentieth annual session. Headquarters will be the Book-Cadillac Hotel.

Dr. R. L. Kleindorfer has moved from Washington to Evansville, where he has taken over the practice of the late Dr. R. M. Walden. Dr. Kleindorfer will confine his practice to surgery.

Dr. Robert E. Lyons, Jr., of Bloomington, has moved to his new six-room office building at Fifth and Grant Streets. The one-story structure contains an office, reception room, two treatment rooms, and two laboratories.

The LaPorte County Medical Society held an open meeting at the LaPorte Civic auditorium, January sixteenth. Dr. R. L. Sensenich of South Bend, president of the Indiana State Medical Association, talked on "Social Aspects of Sickness," and explained why socialized medicine has been a failure in other places, and why it cannot be successful.

The new Woodlawn Hospital of Rochester, a two-story brick building erected at a cost of \$50,000, was opened for inspection January fourth by the owner, Dr. Milton Leckrone. The hospital contains thirty rooms and a modern surgery.

A new building will be erected at Bloomington to house the Bloomington division of the Indiana University School of Medicine, and will be known as the James Wesley Fesler building. Details are given in this issue under "Indiana University News Notes."

DR. AND MRS. EMMETT B. LAMB have returned to their home in Indianapolis after spending six months in South America, where Dr. Lamb was associated with his brother as a surgeon in an oil company's hospital at Peru. Dr. Lamb will resume his practice in Indianapolis.

AT the meeting of the Western Surgical Association held in Rochester, Minnesota, Dr. O. O. Alexander of Terre Haute was elected to fellowship. He is one of four Indiana members, others being Dr. H. O. Bruggeman of Fort Wayne, Dr. W. D. Gatch of Indianapolis, and Dr. E. D. Clark of Indianapolis.

Dr. Charles A. Tompkins, who has been a member of the medical staff of the Home Lawn Sanitarium in Martinsville, has been awarded a fellowship in the department of pediatrics of the Indiana University School of Medicine and will continue his research work there. The award was made possible by a grant from the Mead Johnson Company of Evansville.

William N. Wishard, of Indianapolis, was invited to read a paper before the New York Academy of Medicine, January 15, the occasion being the fifteenth anniversary of the James Buchanan Breedy Foundation in Urology of the New York Hospital. The paper was entitled, "Notes on the Evolution of Prostatic Resections." Dr. William Niles Wishard, Jr., attended the meeting with his father.

The Oconomowoc Health Resort of Oconomowoc, Wisconsin, has been transferred to a nonprofit, nonstock organization for public service, and will be known as the Rogers Memorial Sanitarium in memory of the wife of Dr. Arthur W. Rogers, initiator and director of the Oconomowoc Health Resort. Dr. Rogers will continue as manager under a board of trustees, and at his death his personal fortune will be used as the foundation for an endowment to the institution. The Oconomowoc Health Resort has advertised in this magazine continuously for a great many years.

## INDIANA UNIVERSITY NEWS NOTES

Eighteen medical students who will receive the doctor of medicine degree in June from the Indiana University School of Medicine, and three who will be graduated from out-of-state medical schools, have received appointments to internships in the Indiana University Hospitals located in Indianapolis. They will begin their duties July 1.

Indiana University graduates who will do their interne work in the Indiana University Hospitals will be as follows: J. L. Arbogast, Monmouth, Ill.; Frank B. Bard, Crothersville; Douglas Barkley, Odon; Charles M. Bowman, Albion; Herbert Egbert, Indianapolis; John L. Ferry, Akron; Max Gantz, Marion; Richard E. Gery, Lafayette; Ralph Gettelfinger, Ramsey; Abe Jackson, Paterson, N. J.; James Kirtley, Crawfordsville; Homer L. Life, Indianapolis; Orlando L. Meyer, Bluffton; Albert Ratcliffe, Indianapolis; Winfield Scott, Shelbyville; Louis W. Spolyar, Gary; Elmer S. Zweig, Fort Wayne, and Donald Rendel, Gary.

Others are: Charles S. Campbell, University of Oregon; William C. Keetel, Nebraska College of Medicine, and Henry S. Tanner, Northwestern University.

### NEW MEDICAL SCHOOL BUILDING

A new medical school building will be constructed on the Indiana University campus at Bloomington as one of the Federal projects at the University. The building, which will be constructed of Indiana limestone, will cost \$471,000. The new medical building will be named the James William Fesler building in honor of the president of the University's board of trustees and in recognition of his services as a member of the board since 1902 and president of the board since 1919.

Mr. Fesler received the A.B. degree from Indiana in 1887 and was admitted to the bar in 1890. Since that time he has been in practice at Indianapolis in the firm of Fesler, Elam, Young, Fauvre. He served as county clerk of Marion County, 1894-98, and was a member of the Republican state committee, 1894-98 and 1914-20.

Mr. Fesler was president of the National Association of Governing Boards of State Universities and Allied Institutions in 1923 and 1924 and president of the Indianapolis Bar Association in 1914 and 1915. He holds membership in the Indiana State and American Bar associations, Phi Beta Kappa, Phi Delta Theta and the Loyal Legion. Mr. Fesler served in the U. S. Navy during the Spanish-American War and during 1917 and 1918 was a member of the Marion County council of defense. Mr. Fesler is a member of the University, Literary, Contemporary and Columbia clubs of Indianapolis.

## SOCIETIES — INSTITUTIONS

### COUNTY SOCIETY REPORTS

ALLEN COUNTY (FORT WAYNE) MEDICAL SOCIETY met at the Chamber of Commerce, Fort Wayne, January seventh, with thirty-two present. Dr. Harold Caylor and Dr. A. C. Nickel of Bluffton were the speakers, their subject being "Hyperparathyroidism."

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BOONE COUNTY MEDICAL SOCIETY held its January dinner-meeting at the Ulen Country Club, Lebanon, January eighth, with eleven members present. Dr. O. W. Sicks of Indianapolis presented a paper on "Diagnosis and Treatment of Surgical Conditions of the Abdomen."

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CARROLL COUNTY MEDICAL SOCIETY met at Burlington, January ninth, to hear Dr. John Owens of Indianapolis talk about "Appendicitis in Children."

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CASS COUNTY MEDICAL SOCIETY met at Logansport, December twentieth, for election of officers:

President, H. G. Steinmetz, Logansport.

Vice-President, Reynolds Hickman, Logansport.

Secretary-Treasurer, H. D. Tripp, Logansport.

\* \* \*

DAVIESS-MARTIN COUNTY MEDICAL SOCIETY met at the Daviess County Hospital, Washington, December seventeenth. Officers for 1936 were elected:

President, S. L. McPherson, Washington.

Vice-President, J. R. Rohrer, Elkhora.

Secretary-Treasurer, C. P. Fox, Washington.

\* \* \*

DEARBORN-OHIO COUNTY MEDICAL SOCIETY met in Aurora, December twenty-sixth, for their monthly business meeting. Officers for 1936 are:

President, J. M. Pfeifer, Lawrenceburg.

Secretary-Treasurer, J. C. Elliott, Guilford.

\* \* \*

DECATUR COUNTY MEDICAL SOCIETY met in Greensburg for the election of officers:

President, W. C. Callaghan, Greensburg.

Vice-President, I. M. Sanders, Greensburg.

Secretary-Treasurer, Charles F. Overpeck, Greensburg.

\* \* \*

ELKHART COUNTY MEDICAL SOCIETY met at the Hotel Elkhart in Elkhart, January second, for a dinner meeting. Dr. William R. Cubbins of Chicago spoke on "Fractures of the Arm." Attendance numbered thirty-nine.

\* \* \*

GIBSON COUNTY MEDICAL SOCIETY has established a speakers' bureau, which will supply speakers for lay clubs or organizations. A wide variety of subjects is offered.

\* \* \*

GRANT COUNTY MEDICAL SOCIETY met at Marion, December twenty-seventh, for a ladies' night party and installation of new officers. Attendance numbered fifty-five. Robert Berg, cartoonist for the Indianapolis Times, entertained the guests.

\* \* \*

GREENE COUNTY MEDICAL SOCIETY met at Linton-Greene County Hospital at Linton, December twelfth, for election of officers.

President, B. Raney, Linton.

Vice-President, W. Craft, Linton.

Secretary-Treasurer, S. Rotman, Jasonville.

\* \* \*

HAMILTON COUNTY MEDICAL SOCIETY elected the following officers for 1936 at its annual homecoming and dinner meeting, December tenth:

President, Haldon Kraft, Noblesville.

Vice-President, Sam Hooke, Noblesville.

Secretary-treasurer, Ray Shanks, Noblesville.

HANCOCK COUNTY MEDICAL SOCIETY met December eighteenth at Greenfield. Dr. E. L. Lingeman of Indianapolis was scheduled to address the meeting, but was unable to attend, and Dr. C. H. Bruner read Dr. Lingeman's paper on "The Common Cold." Officers were elected as follows:

President, R. E. Kinneman, Greenfield.

Vice-President, C. H. Bruner, Greenfield.

Secretary-Treasurer, J. L. Allen, Greenfield.

Hancock County Medical Society supplied a program for the Shelby County Medical Society at Shelbyville, January fifteenth, and the Rush County Medical Society were guests. A symposium on "Tonsils" will be presented.

\* \* \*

HARRISON COUNTY physicians met at the office of Dr. W. E. Amy, December eighteenth, and reorganized the Harrison County Medical Society, and plans were made to hold meetings at regular intervals during 1936. Officers elected are:

President, Frederick M. Applegate, Corydon.

Vice-President, E. W. Murphy, Lanesville.

Secretary-Treasurer, W. E. Amy, Corydon.

\* \* \*

HENRY COUNTY MEDICAL SOCIETY members met at the residence of Dr. W. C. Van Nuys in New Castle, January ninth, to hear Dr. George S. Bond of Indianapolis discuss "Arteriosclerosis and Coronary Disease." This was a dinner meeting with an attendance of twenty-five.

\* \* \*

HUNTINGTON COUNTY MEDICAL SOCIETY met at the Elks Club in Huntington, January seventh. Dr. A. N. Ferguson of Fort Wayne talked on "Some of the Rare Diseases in Medicine." Fifteen members attended.

\* \* \*

INDIANAPOLIS MEDICAL SOCIETY met January seventh at the Indianapolis Athletic Club for annual dinner and reception and installation of new officers. The retiring president, Dr. Carl H. McCaskey, presented a paper on "Luke, the Physician" and the incoming president, Dr. Karl R. Ruddell, presented a certificate of service to Dr. McCaskey.

\* \* \*

JACKSON COUNTY MEDICAL SOCIETY members elected the following officers for 1936:

President, W. D. Day, Seymour.

Vice-President, G. A. Gillespie, Brownstown.

Secretary-Treasurer, G. H. Kamman, Seymour.

\* \* \*

JAY COUNTY MEDICAL SOCIETY met at Portland, January third. Dr. Charles Cooney of Fort Wayne was the principal speaker. His subject was "The Importance of Urological Diseases in the Production of Abdominal Symptoms."

\* \* \*

LAPORTE COUNTY MEDICAL SOCIETY met at the Spaulding Hotel, Michigan City, December nineteenth, to hear Dr. Eric Oldberg talk on "Fractures of the Spine." Attendance numbered twenty-nine. Officers elected for 1936 are:

President, Frank V. Martin, Michigan City.

Vice-President, George W. Kimball, LaPorte.

Secretary-Treasurer, Bo Martin, LaPorte.

\* \* \*

MADISON COUNTY MEDICAL SOCIETY held its meeting at Anderson, December sixteenth, for election of officers, which resulted as follows:

President, E. E. Hunt, Pendleton.

Vice-President, C. V. Rozelle, Anderson.

Secretary-Treasurer, M. A. Austin, Anderson (re-elected for the eighteenth consecutive year).

\* \* \*

MARSHALL COUNTY MEDICAL SOCIETY met at the Hi-Way Inn, Plymouth, January eighth. Dr. Ira Perry and Mr. Jess Moyer of North Manchester talked on collections and credit rating bureaus. Attendance numbered sixteen.

MIAMI COUNTY MEDICAL SOCIETY held its annual meeting at Peru, December thirtieth. Officers were elected as follows:

President, J. B. Shoemaker, Miami.

Vice-President, O. C. Wainscott, Peru.

Secretary-Treasurer, E. H. Andrews, Peru.

\* \* \*

MONROE COUNTY MEDICAL SOCIETY officers for 1936 are:

President, Melville Ross, Bloomington.

Vice-President, Phil Holland, Bloomington.

Secretary-Treasurer, Dillon Geiger, Bloomington.

\* \* \*

MONTGOMERY COUNTY MEDICAL SOCIETY met at the Culver Hospital in Crawfordsville, December nineteenth, to hear Dr. Alexander Brunschwig of Chicago talk on "Cancer and the General Practitioner." Attendance numbered thirty. Officers were elected as follows:

President, Robert J. Millis, Crawfordsville.

Vice-President, M. E. Gross, Ladoga.

Secretary-Treasurer, John L. Sharp, Crawfordsville.

\* \* \*

NORTHEASTERN INDIANA ACADEMY OF MEDICINE elected Dr. Harold O. Williams of Kendallville as president for 1936 at the meeting held December twentieth. Other officers are vice-president, Dr. Harold Nugen, Auburn; secretary, Dr. Fred Black, Ligonier; chairman of the Program Committee, Dr. C. E. Munk of Kendallville. Principal speakers at the meeting were Dr. E. M. Van Buskirk of Fort Wayne and Dr. B. F. Wiseman of Ohio.

\* \* \*

ORANGE COUNTY MEDICAL SOCIETY met in Paoli, January seventh, to hear Dr. J. I. Maris discuss "Medical Care for Indigent Relief." Officers for 1936 are:

President, R. L. Holiday, Paoli.

Vice-President, J. I. Maris, Paoli.

Secretary-Treasurer, George Dillinger, French Lick.

\* \* \*

OWEN COUNTY MEDICAL SOCIETY met at Spencer, December twenty-seventh. Officers were elected as follows:

President, M. S. Brown, Spencer.

Secretary-Treasurer, Julia Thom, Gosport.

\* \* \*

PARKE-VERMILLION COUNTY MEDICAL SOCIETY met at Clinton, December eighteenth. Dr. D. R. Ulmer of Terre Haute presented a talk on "Fractures" accompanied by slides. Attendance numbered twelve. Officers were elected as follows:

President, C. M. White, Clinton.

Secretary-Treasurer, Paul Casebeer, Clinton.

\* \* \*

PERRY COUNTY MEDICAL SOCIETY met at Tell City, January eighth, for election of officers:

President, N. A. James, Tell City.

Vice-President, J. E. Taylor, Leopold.

Secretary-Treasurer, D. S. Conner, Cannelton.

\* \* \*

PIKE COUNTY MEDICAL SOCIETY met at Petersburg, December nineteenth, and elected the following officers for 1936:

President, T. R. Rice, Petersburg.

Vice-President, John T. Kime, Petersburg.

Secretary-Treasurer, A. R. Logan, Petersburg.

\* \* \*

RANDOLPH COUNTY MEDICAL SOCIETY met December ninth at Winchester for its annual banquet and election of officers. A meeting was held with county trustees to talk over fee schedules.

\* \* \*

RIPLEY COUNTY MEDICAL SOCIETY officers for 1936 are:

President, R. L. Smith, Osgood.

Secretary-Treasurer, George S. Row, Osgood.

\* \* \*

RUSH COUNTY MEDICAL SOCIETY officers for 1936 are:

President, Frank H. Green, Jr., Rushville.

Vice-President, Willis Pugh, Milroy.

Secretary-Treasurer, Donald F. Dean, Rushville.

STEUBEN COUNTY MEDICAL SOCIETY met at Angola, January third, and elected the following officers for 1936:  
 President, L. L. Eberhart, Angola.  
 Vice-President, B. A. Blosser, Fremont.  
 Secretary-Treasurer, S. S. Frazier, Angola.

\* \* \*

ST. JOSEPH COUNTY MEDICAL SOCIETY met December tenth at the Children's Dispensary, South Bend, with Dr. George M. Rosenheimer as principal speaker. His subject was "Anesthetics." Thirty-five members and forty-five guests (nurses) were present. Films were shown on the "Modern Methods of Anesthesia."

At the December seventeenth meeting Dr. James McMeel of South Bend talked on "Injuries in Football." Pictures of the Notre Dame-Ohio State football game were shown.

\* \* \*

SULLIVAN COUNTY MEDICAL SOCIETY elected the following officers at its December meeting:

President, J. H. Crowder, Jr., Sullivan.  
 Vice-President, J. W. Woner, Sullivan.  
 Secretary-Treasurer, M. H. Bedwell, Sullivan.

\* \* \*

TIPTON COUNTY MEDICAL SOCIETY met at Tipton, December nineteenth, with Dr. Matthew Winters of Indianapolis as principal speaker. His subject was "Vomiting in Children." The following officers were elected for 1936:

President, H. B. Shoup, Sharpsville.  
 Vice-President, H. E. Grishaw, Tipton.  
 Secretary-Treasurer, E. B. Moser, Windfall.

\* \* \*

VANDERBURGH COUNTY MEDICAL SOCIETY met at the Y. M. C. A. Building in Evansville, December tenth, when the following officers were elected for 1936:

President, Robert R. Acre, Evansville.  
 Vice-President, G. C. Johnson, Evansville.  
 Secretary-Treasurer, Philip E. Yunker, Evansville.

#### INDIANA STATE MEDICAL ASSOCIATION THE COUNCIL

The annual midwinter meeting of the Council of the Indiana State Medical Association was called to order by Dr. O. O. Alexander, of Terre Haute, chairman, at 11:00 a. m., Sunday, January 12, 1936, in Parlor E, fifth floor, of the Indianapolis Athletic Club, Indianapolis. Roll call showed the following present:

##### Members of the Council—

First District—I. C. Barclay, Evansville.  
 Second District—H. C. Wadsworth, Washington.  
 Third District—H. C. Ragsdale, Bedford.  
 Fourth District—M. C. McKain, Columbus.  
 Fifth District—O. O. Alexander, Terre Haute.  
 Seventh District—C. J. Clark, Indianapolis.  
 Eighth District—M. A. Austin, Anderson.  
 Ninth District—F. T. Romberger, Lafayette.  
 Tenth District—N. K. Forster, Hammond.  
 Eleventh District—Ira Perry, North Manchester.  
 Twelfth District—E. M. VanBuskirk, Fort Wayne.  
 Thirteenth District—W. B. Christophel, Mishawaka.

##### Officers—

R. L. Sensenich, president 1936.  
 E. D. Clark, president-elect.  
 A. F. Weyerbacher, treasurer.  
 E. M. Shanklin, editor of *The Journal*.  
 T. A. Hendricks, executive secretary.

##### Guests—

D. A. Bickel, South Bend, chairman, Committee on Arrangements for 1936 Convention.  
 J. W. Hilbert, South Bend, chairman, Local Committee on Arrangements.

As the minutes of the October, 1935, meetings of the Council in Gary were approved as printed in the November *Journal*, on motion, duly seconded and carried, these minutes were not read.

#### REPORTS OF COUNCILORS BY DISTRICTS

**First District**—Barclay. The business meeting of the first district was not held last year, the only district meeting which we had being held with the postgraduate assembly. So no councilor or officers have been chosen for the ensuing year. The Council passed on Dr. Hare's resignation, and my name was put up to fill his unexpired term. . . . It is up to the Council to take some action at this time on that.

(The Council felt that the election of a councilor is a district matter and that Dr. Barclay should continue to serve until a district meeting is held and the First District Medical Society elects new officers.)

**Second District**—Wadsworth. Daviess County will entertain the second district on the afternoon and evening of Tuesday, June 18. . . . No county should give up its county organization even though it has a small number of doctors.

**Third District**—Ragsdale. Nothing to report.

**Fourth District**—McKain. No report.

**Fifth District**—Alexander. Our next district meeting will be held the first Friday in May of 1936 at the Deming Hotel, Terre Haute, at 6:30 p. m. Otherwise I have nothing to report.

**Seventh District**—C. J. Clark. The seventh district meeting was held in Indianapolis in November at which time we had a clinical meeting at the City Hospital followed by a dinner meeting in the evening, Dr. Paul White of Boston being the speaker of the evening.

**Eighth District**—M. A. Austin. I am glad to say that all the societies in my district are functioning perfectly, having excellent meetings. We held our spring meeting last year at Anderson. We had two men from Mayos and one from Lexington, Kentucky, and the expense was over two dollars for every doctor who was in attendance. In consequence, we had to pay out of our county society funds about \$90.00 to make up the deficit of the district meeting. We had no fall meeting. . . . Unfortunately for the district meetings, the Muncie Academy of Medicine is so outstanding that it is able to have the best talent in the country and we see and hear these outstanding men once every two weeks at least, so that the district society can't bring to the district any better men than we can hear every two weeks at Muncie.

**The Chairman**—I feel it is necessary to carry on your district society at least on paper. Why not have a joint meeting of the Muncie Academy and the district society, and then in the fall have a meeting with a county society?

**Ninth District**—Romberger. Our district meetings are very well attended. We have good meetings which seem to be due to the friendly competitive spirit between the county medical societies in the district. We finance our district meetings by a 25-cent assessment of each member in the district; that is collected along with our state and county dues. This year we meet in Lafayette; I hope you all can come, especially the officers and the neighboring councilors.

**Tenth District**—Forster. Due to the fact that the state meeting was held in Gary in the fall, the tenth district had no fall meeting. The officers of the tenth district have been compelled to take quite a sizable deficit on their shoulders. I think it would be advisable to work out some uniform way to take care of this.

**Eleventh District**—Perry. I think we have a cracking good district society. We meet twice a year. There has not been a time in the last ten years when we didn't have from \$400.00 to \$800.00 in our district society treasury. We collect \$1.00 apiece for district dues; collected along with the county dues. The secretary of each county remits as fast as county and state dues are received. The only expense to the man attending the district meeting is his dinner in the evening.

**Twelfth District**—VanBuskirk. Nothing of importance to report.

**Thirteenth District**—Christophel. We had our district meeting at Rochester Nov. 6, and had a very good meeting. As to financing the meeting, all members in the district pay a fee of \$1.00 plus the dinner fee. We have enough money to pay for everything, even the rental of the hall. It is very easy to get a city or county society to hold a meeting when you say they will have no expense. . . . We always ask the city who takes the meeting to put on a clinic in the forenoon. . . . This high school debate on state medicine is very

interesting to me. The high school youngsters have taken a great deal of interest in that debate. My first experience was that all the youngsters wanted to be on the affirmative side; since then there has been a change to the negative.

(Further discussion of district societies brought out the point that the district society from both a political and a medical standpoint is very essential to the State Association. It is up to each district society to make regulations for financing its meetings.)

#### REPORTS OF OFFICERS

**Dr. R. L. Senzenich**, president, spoke of the work of the various Association committees, saying, "It is my hope, and in the interest of the Association, that the committees will be more active this year than in the past. If a committee has been created, it has been created because there is something for the members of that committee to do, and if there is something for them to do, it should be done." He told of the plans of the State Association to hold a two-day post-graduate course in Indianapolis in May, and spoke of the arrangements for the annual session at South Bend in October.

**Dr. E. D. Clark**, president-elect, said he was heartily in accord with the postgraduate program and he believed the Association was on the right track in so arranging this meeting.

**Dr. A. F. Weyerbacher**, treasurer, gave a summary of the following annual financial report as drawn up by the George S. Olive and Company, certified public accountants:

#### TREASURER'S REPORT

January 8, 1936.

The Council,  
Indiana State Medical Association,  
Indianapolis, Ind.

Gentlemen:

We have examined the cash records of your association for the year ended December 31, 1935. This examination was undertaken for the purpose of determining and verifying the cash transactions for the year.

The results of our examination are presented in this report, which includes: (1) text of comments; (2) statement of assets of all funds at December 31, 1935; (3) statements of receipts and disbursements of all funds for the year ended December 31, 1935. A list of the statements is presented on the page following this text.

#### GENERAL COMMENTS

In exhibit A is presented an analysis of the increase in assets of the Association for the year ended December 31, 1935, showing in summary form the sources from which this increase was derived. We have adjusted the amount of assets as shown by the previous auditor's report at December 31, 1934, to an amount of \$36,082.59, as follows:

Total assets of all funds at December 31, 1934, per previous auditor's report..... \$38,919.59

General fund check to **Journal**, shown as undeposited..... \$ 14.00

Deduct:

General fund check to **Journal**, deposited January, 1935..... 12.00

Correction ..... 2.00

Members' dues for 1935 deposited in December, 1934, taken into income in 1935 2,835.00

2,837.00

Total assets of all funds at December 31, 1934—exhibit A..... \$36,082.59

Details of the assets of all funds are presented in exhibit B.

Details of the receipts and disbursements of cash in the general fund, **The Journal** of the Indiana State Medical Association, and the medical defense fund are presented in exhibits C, D, and E.

Yours very truly,

GEORGE S. OLIVE & CO.,  
Certified Public Accountants.

INDIANA STATE MEDICAL ASSOCIATION

List of Statements Contained in Report on Examination  
of Cash Records, Year Ended December 31, 1935

Exhibit A—Analysis of increase in assets, all funds, year ended December 31, 1935.

Exhibit B—Statement of assets, all funds, at December 31, 1935.

Exhibit C—Comparative statement of cash receipts and disbursements of the general fund, years ended December 31, 1935, and December 31, 1934.

Exhibit D—Statement of cash receipts and disbursements of **The Journal** of the Indiana State Medical Association, year ended December 31, 1935.

Exhibit E—Statement of cash receipts and disbursements of the medical defense fund, year ended December 31, 1935.

#### EXHIBIT A

##### Analysis of Increase in Assets, All Funds, Year Ended December 31, 1935

TOTAL ASSETS, DECEMBER 31, 1935—	
exhibit B .....	\$39,457.84
TOTAL ASSETS, DECEMBER 31, 1934...	36,082.59
NET INCREASE.....	\$ 3,375.25
Arising from the following sources:	
Purchase of United States Treasury bonds .....	\$ 5,000.00
Excess of cash receipts over disbursements— <b>Journal</b> of the Indiana State Medical Association, year ended December 31, 1935.....	702.15
Excess of cash receipts over disbursements—medical defense fund, year ended December 31, 1935.....	457.69
	6,159.84
Less: Reduction of cash balance in general fund, year ended December 31, 1935—exhibit C .....	2,784.59
Total net increase.....	\$ 3,375.25

#### EXHIBIT B

##### Statement of Assets, All Funds, at December 31, 1935

GENERAL FUND:	
Cash on deposit—exhibit C.....	\$ 2,528.54
Petty cash fund.....	200.00
Investments:	
Ft. Wayne, Indiana, School Improvement Bonds.....	3,000.00
Lake County, Indiana, State Highway Aid Bonds.....	2,000.00
Marion County, Indiana, Flood Prevention Bonds.....	3,000.00
Indianapolis City Hospital Bonds....	5,000.00
United States Treasury Bonds.....	5,000.00
Beachtown Court Apartments, Chicago—bonds evidenced by certificates of deposit .....	4,000.00
Rokeby Apartment Hotel, Chicago—bond evidenced by certificate of deposit .....	1,000.00
Total general fund assets.....	\$25,728.54

##### JOURNAL OF THE INDIANA STATE MEDICAL ASSOCIATION:

Cash on deposit—exhibit D..... 2,436.34

##### MEDICAL DEFENSE FUND:

Cash on deposit—exhibit E..... \$ 1,292.96

Investments:

Ft. Wayne, Indiana, School Improvement Bonds .....	2,000.00
Marion County, Indiana, Flood Prevention Bonds.....	2,000.00
Indianapolis City Hospital Bond.....	1,000.00
United States Treasury Bonds.....	5,000.00

Total medical defense fund assets.. 11,292.96

TOTAL ASSETS—ALL FUNDS—exhibit A \$39,457.84

## EXHIBIT C

Comparative Statement of Cash Receipts and Disbursements,  
Years Ended December 31, 1935, and December 31, 1934

## GENERAL FUND

Year Ended			
Dec. 31 1935	Dec., 31 1934	Increase —Decrease	

## BALANCE BEGINNING OF

YEAR .....	\$ 5,313.13	\$ 2,625.89	\$ 2,687.24
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## RECEIPTS:

Membership dues.....	19,470.00	19,141.00	329.00
Income from exhibits.....	1,950.00	1,792.50	157.50
Postgraduate study.....	74.84	124.45	—49.61

## Interest income:

United States Government Bonds .....	317.65	215.14	102.51
Indianapolis, Indiana, City Hospital Bonds.....	247.50	247.50	
Marion County, Indiana, Flood Prevention Bonds..	212.50	212.50	
Ft. Wayne, Indiana, School Improvement Bonds.....	225.00	225.00	
Lake County, Indiana, State Highway Aid Bonds.....	100.00	150.00	—50.00
Journal subscription.....		2.00	—2.00

Total receipts.....	22,597.49	22,110.09	487.40
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## BEGINNING BALANCE PLUS

CASH RECEIPTS .....	27,910.62	24,735.98	3,174.64
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## DISBURSEMENTS:

Transfers of applicable portion of dues to: The Journal of the Indiana State Medical Association—exhibit D.....	5,602.00	5,492.00	110.00
Medical defense fund—exhibit E.....	2,081.25	2,044.50	36.75
Headquarters office expense.....	8,535.06	8,318.11	216.95
Publicity committee.....	260.70	431.75	—171.05
Public policy.....	429.15	187.90	241.25
Council .....	110.85	123.29	—12.44
Officers .....	491.17	311.36	179.81
Annual session.....	1,805.01	1,720.33	84.68
Miscellaneous committees.....	787.99	582.20	205.79
Potgraduate study.....	6.90	211.41	—204.51
Premium and accrued interest on purchase of United States Treasury Bonds.....	272.00		272.00

Total disbursements.....	20,382.08	19,422.85	959.23
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BALANCE OF OPERATING RECEIPTS AND DISBURSEMENTS .....	7,528.54	5,313.13	2,215.41
Deduct: Disbursement for United States Treasury Bonds .....	5,000.00		5,000.00

## CASH BALANCE, END OF

YEAR .....	\$ 2,528.54	\$ 5,313.13	—\$2,784.59
(Exhibit B)		(Exhibit A)	

## EXHIBIT D

## Statement of Cash Receipts and Disbursements, Year Ended December 31, 1935

JOURNAL OF THE INDIANA STATE MEDICAL ASSOCIATION  
BALANCE, JANUARY 1, 1935..... \$ 1,734.19

## RECEIPTS:

Subscriptions—members—exhibit C.....	\$ 5,602.00
Subscriptions—non-members .....	50.75
Advertising .....	8,689.58
Collections on accounts receivable.....	521.50
Single copy sales.....	7.00
Electrotypes .....	53.82
Reprints and refund.....	13.09

Total receipts.....	14,937.74
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## DISBURSEMENTS:

Editorial and management salaries.....	\$ 6,475.00
Expenses of editorial board.....	18.46
Printing .....	5,295.24
Postage .....	438.85
Electrotypes .....	377.43
Office rent and light.....	730.86
Office supplies.....	111.76
Advertising commissions.....	32.48
Press clippings.....	111.18
Extras—help and printing.....	295.44
Convention reporter.....	146.65
Copyright fees.....	14.35
Miscellaneous .....	187.89

Total disbursements.....	14,235.59
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BALANCE, DECEMBER 31, 1935—exhibit B	\$ 2,436.34
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## EXHIBIT E

## Statement of Cash Receipts and Disbursements, Year Ended December 31, 1935

## MEDICAL DEFENSE FUND

BALANCE, JANUARY 1, 1935.....	\$ 835.27
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RECEIPTS:	Transfer of applicable portion of dues from the general fund—exhibit C.....	2,081.25
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2,916.52
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## DISBURSEMENTS:

Salary of Association attorney.....	\$ 600.00
Malpractice fees.....	1,008.50
Treasurer's bond.....	15.00
Check tax.....	.06

1,623.56
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BALANCE, DECEMBER 31, 1935—exhibit B	\$ 1,292.96
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Dr. E. M. Shanklin, editor of *The Journal*. "The *Journal* staff is, and I believe has a right to be, proud of the 1935 *Journal*. The number of reading pages exceeded by eight pages any other *Journal* published in its previous existence. . . . We are still using black ink in *The Journal*. . . . Advertising has increased. . . . One thing we have tried to do and that is to get our membership to pay a little more attention to the advertising in *The Journal*. . . . It will help us a whole lot in the next year if you answer the advertisements that have a coupon attached, and deal with those firms who advertise in *The Journal*. . . . I wish to take this occasion to express my deepest appreciation to the editorial board. . . . I have nothing but words of praise for the entire *Journal* staff, the office force, the editorial board, and the managing editor. If one person is to be praised more than any other, I will extend that praise to Miss Toman. . . . In conclusion I want to say that this *Journal* belongs to the Indiana State Medical Association. It is published under the direction of the Council. In other words, gentlemen, if it occurs to you, as the supervisors of the publication of *The Journal* of the Indiana State Medical Association, that we do things, we say things, or fail to do or say things that need correction, we would be very glad to receive criticisms from you."

## UNFINISHED BUSINESS

Dr. VanBuskirk reported that the Wells County Medical Society does not wish to give up its individual charter and that some provisions are being made in the By-Laws of the Allen County Medical Society to bring in from the Wells County Medical Society those who so wish as associate members. Upon motion by Dr. VanBuskirk, seconded by Dr. C. J. Clark, this matter was postponed indefinitely.

## SUGGESTIONS AND PROPOSALS FOR 1936 SESSION

## AT SOUTH BEND

1. The dates set by the Executive Committee upon direction of the Council, Tuesday, Wednesday and Thursday, October 6, 7, and 8, 1936, were approved by the Council.

2. General outline of suggested program:

Monday, October 5, 1936

Meeting of state health officers.

**Tuesday, October 6, 1936**

Morning—Registration, golf, and sightseeing trips.  
 Afternoon—Meetings of the House of Delegates and Council.  
 Evening—Smoker and stag party. Theater party or other entertainment for women.

**Wednesday, October 7, 1936**

Morning—General Meeting.  
 Afternoon—Section meetings.  
 Evening—Annual banquet.

**Thursday, October 8, 1936**

Morning—Meeting of the House of Delegates and Council. General meeting.  
 Noon—Adjournment.

Dr. VanBuskirk made a motion, which was unanimously seconded and carried, that section meetings be held at the South Bend session.

(3) **Convention facilities for 1936.** Dr. D. A. Bickel, chairman of the General Arrangements Committee, made a report to the Council concerning hotel, meeting and exhibit accommodations, entertainment, etc., in South Bend. "The Arrangements Committee has deviated from the custom of the past by taking separate and distinct building for convention headquarters. The committee wishes to request of the Council additional funds. We anticipate that this will take \$350.00 in addition to what it has taken in previous years."

After some discussion the matter of appropriating a definite sum to take care of extra convention expenses was deferred until after lunch. Dr. Bickel and Dr. Hilbert were requested in the meantime to make up a statement giving the Council definite figures on the amount needed and for what it would be spent.

**LUNCHEON**

The Council recessed for luncheon in Parlor A, fifth floor, of the Indianapolis Athletic Club, at 1:15 o'clock.

The following guests and committee chairmen, or members, were present and gave brief reports on the activities of their offices:

**Dr. H. H. Wheeler**, member of the Executive Committee of the State Association, reported that the Executive Committee had been very active, meeting every fourth Sunday. "The greatest thing that has been troubling the Executive Committee is the printing of THE JOURNAL. That, we feel, has been settled."

**Dr. Verne K. Harvey**, director of the State Division of Public Health, said that his time recently has been taken up with the Social Security Act. "Of course, no appropriation has been made as yet by Congress for carrying out the provisions of this act. In Washington they feel fairly certain that it will be made shortly. The parts of the Social Security Act which will affect public health administration in Indiana will come through the Children's Bureau of the Department of Labor and the United States Public Health Service of the Department of Treasury. Several months ago I asked this Association to appoint two men to represent the State Association on a committee including two men appointed from the Indiana University School of Medicine to meet with the State Board of Health as a liaison committee to consider the problems and adopt policies to be followed when the Social Security money is made available. I think this committee will be one of the best safeguards to guarantee a sane administration of additional funds for public health work. I wish to take this opportunity to express my appreciation and the appreciation of the members of the State Board of Health for the fine cooperation we have received from the State Medical Association and its officers during the past year."

**Dr. W. D. Gatch**, dean, Indiana University School of Medicine, Indianapolis. "I wish to say that as Dean of the Medical School it has been a cardinal principle with me to cooperate with the organized medical profession of the state in every possible way. We have done so on several occasions. I think the most noteworthy instance of this cooperation, and the one in which we all ran the most risk of getting into trouble, was in the reorganization of the State Board of Health. I think I can say, without the possibility of being contradicted, that this has turned out very well and has been a great saving to the State of Indiana. As far as I know, the conduct of the laboratory of the State Board of Health has been satis-

factory to the profession of the state.

"Dr. Harvey recently asked me to appoint two men as representatives of the Medical School to a committee to advise him on whatever action is necessary to be taken about the Social Security Act. I appointed Dr. Beckman and Dr. Asher, who I am sure will be satisfactory to you.

"I wish to thank you, Mr. President, for the courtesy of this invitation and this opportunity to address you, and to assure you that I wish the State Medical Association well, and, that as far as as it is in my power, I wish to continue to cooperate with it in every possible way."

**Mr. Albert Stump**, attorney for the State Association, spoke of his work in safeguarding the doctors against malpractice suits and his activities during the past year in legislation against cults, in the relief program and in problems of medical economics. He also spoke of the threatened malpractice suits arising from the use of dinitrophenol.

(At this point Mr. Hendricks read a letter in regard to advertising by unlicensed practitioners from Dr. William R. Davidson, secretary of the State Board of Medical Registration and Examination, who was unable to be present.)

**Dr. O. T. Scamahorn**, chairman of the Committee on Legislation and Public Policy. Dr. Scamahorn said, "I am convinced that ten minutes spent with a man contemplating running in the primary is worth ten hours spent with him after he gets on the floor. I have had the co-operation of practically every doctor in the state and all of the districts. I do not believe we can get along without the districts in politics any more than we can get along without our county societies."

**Dr. E. D. Clark**, in the absence of Dr. William N. Wishard, chairman of the Bureau of Publicity, made a few remarks regarding the work of the bureau.

**Dr. Sensenich**: "I am sure the members of the Bureau of Publicity would like to have your reaction to the new line of material which has been released to the newspapers in which Indiana is stepping into the forefront in calling the attention of the public to the social aspects of sickness."

**Dr. C. J. Clark**, chairman of the Committee on Graduate Education, outlined the plans of his committee for the exchange of speakers between the various counties and also for a two-day postgraduate meeting which is to be combined with the University Medical School to be held the latter part of May. He stated it would be necessary to have one or two outstanding outstate speakers on the two-day program to get a large attendance, and he had estimated that the expense of these speakers and the entire meeting would be about \$600.00.

(Following discussion by Dr. Barclay, Dr. Austin and Dr. Clark, Dr. Wadsworth made the motion that the Association "pay \$600.00 toward putting on this postgraduate school." This motion was seconded and carried unanimously.)

**Dr. M. A. Austin**, chairman, Committee on Study of Health Insurance. "The Committee on Study of Health Insurance has been rather inactive during the past year because it has vicariously benefited by the activities of the national organization. Its most important work has been to see that proper information has been supplied to the various libraries and high schools over the state, to give the medical viewpoint to high schools debating on the subject of health insurance. At the last meeting of the Madison County Medical Society I gave an abstract of the Kansas outline they had prepared for the debaters. I also took occasion to recommend to Mr. Hendricks that every county society would be benefited if they took the time of one meeting to go over this outline so that the members could know the background of the affirmative side. I also have recommended that each member of our society read carefully the November Bulletin of the American Medical Association, which gives in brief the debate between Dr. Fishbein and William Foster at Purdue University last month. I regretted it was impossible for me to arrange to attend that meeting. Unfortunately general problems of any organization are given little attention by individual members until such a time as they find some direct effect on their income coming from adverse legislation. I wish to compliment the executive secretary of our state organization for his active co-operation in getting bulletins to interested persons, giving them proper information on our side of the question; also Dr. Sensenich for his work with the national organization and for the sacrifices of time and money which he has

made in visiting our various county and district societies in the interest of organized medicine."

**Dr. W. D. Little**, chairman, Committee on Study of High School Athletics. "We have nothing new to report except that we would like to get a record, if possible, of these boys who are refused permission to take part in competitive athletics, if a way can be worked out to get such a record that will not be burdensome to the physician. It might be valuable, and certainly it would be interesting.

In the absence of **Dr. F. S. Crockett**, chairman of the Township Trustees' Liaison Committee, Dr. Romberger spoke for him. He said, "This committee has been working and they feel that their greatest duty and their greatest help is in fore-stalling adverse things which might come up in this township trustee set-up. . . . Dr. Crockett wishes to compliment the Council on the 1935 JOURNAL. He also asked me to express his regrets to the Council in the retirement of Dr. W. H. Kennedy."

**Dr. H. F. Beckman**, chairman, Committee for the Study of Puerperal Mortality. "I have not as yet contacted my committee, as I have no program organized to offer. I have inherited a program from the preceding committee which meets my endorsement and likewise we have other thoughts to add to this program. The previous chairman complained that he received no reply from the county society secretaries. It is necessary that we contact the profession and the public in this campaign, and these contacts should be made through the county society secretaries. . . . I contemplate continuing this contact with the profession and the public through the county societies, through their secretaries and through the state JOURNAL. . . . I likewise would draw your attention to the relation existing between the previous committee and the staff of the Medical School where they offered to provide information and speakers if desired. Only a few calls have been received, which would indicate that that is not popular or in demand. I trust to stimulate interest in the county societies in our subject, and I certainly will urge contact with the public through these county societies.

**Dr. M. N. Hadley**, chairman, Committee on Prevention of Traffic Accidents. "This Committee on Traffic Accidents is one of the newer committees of the State Association and came into existence as a result of a resolution that was adopted by the House of Delegates a year ago last fall. The committee's report last year contented itself to calling attention to the situation in the matter of traffic accidents and the menace that traffic accidents are to health and life, and suggesting that some action be taken by the organized medical profession to interest itself in these problems. Since the appointment of this committee you all know that public sentiment has been tremendously aroused on the subject of traffic accidents and I think it is safe to say that the medical profession has lost out from the standpoint of the agitation of a problem of extremely vital interest to the American people. Already the movement is in the hands of outside agencies. It is very unfortunate that the medical profession has been inactive in that movement. Certainly we can have some influence upon the direction in which corrective measures may be taken. Everybody knows that it is an extremely complex problem which cannot be answered in a short time. Nor can it be answered by any certain panacea. . . . I had a conference with Mr. Stiver, State Director of Safety, a few days ago. He had just returned from Purdue and he told me something of the plans which are now under way in the State of Indiana in attempting to do something about this problem. The Governor has appointed a Committee on Public Safety on which there are some fifteen or twenty members. The plan is to use WPA funds and personnel to put on a safety campaign through a program that is largely educational. This program is to be carried out in each county. Local committees are to be appointed with representation from the Parent-Teacher Association, Rotary Club, Lions Club, etc. It seems to me that the medical profession should have representation on these committees.

"Personally I feel that speed is one of the big factors in the problem. The type of injuries with which we are confronted are the type that can be produced only under speed.

"The other point of interest to the medical profession should be in regard to drivers' licenses. Certainly the medi-

cal profession should have something to say in the matter of formulating a driver's license law. I believe that every county society should put on a program in its county on this general problem of safety. It is inconceivable to me that a civilized country should go on as we are going on. I should like to see the entire weight of the state organization behind a program which is designed to help in this movement."

**Dr. Sensenich**: "I have contacted some of those who will have to do with the general program and there is, as Dr. Hadley says, a distinct disinclination to enter into the matter of speed. Automobile manufacturers have been selling their machines on speed and they are not going to interrupt that plan. The fitness of those permitted to drive is another angle. I don't know how to approach this representation on committees. Shall we go to the Governor and ask that he appoint someone?"

**Dr. Hadley**: "I was a little disappointed because the Governor had not put a physician on. One other thing, the matter of reporting accidents. There are no accurate statistics as to the number of and type of accidents which occur. Mr. Stiver follows the National Safety Council record card. Personally it seems to me that there ought to be some technic in which the more serious injuries are reported in automobile accidents. We ought to have that information; we don't have it. It is a problem of public health that far exceeds many other things on which we spend a tremendous amount of time. Anything we can do to add to this movement we should do."

**Dr. Austin**: "I make a motion that this Council go on record approving a program on the prevention of traffic accidents, to be recommended by the Executive Committee to the various county organizations." Motion seconded by Dr. Christophel and carried.

**Dr. J. C. Carter**, member of the State Division of Public Health Liaison Committee to Deal with Social Security Act, said he had nothing to report, as Dr. Harvey had told what the activities of this committee are and as no money had been appropriated as yet by the government.

**Dr. L. T. Rawles**, chairman of the Committee on Student Debates, spoke of the work of his committee in contacting debate coaches and debaters who are taking part in debates on the national debate question of socialized medicine. He called attention to the map showing what had been done in the way of dissemination of material in the state and to whom the material had been disseminated. "In the northern part of the state I have gotten speakers to go before the luncheon clubs, Business and Professional Women's Club, parent-teacher organizations, etc. There is considerable missionary work to be done. I am using the Kansas plan. I am very frank to say that our Fort Wayne Central High School negative team has not been licked yet."

(Mr. Hendricks suggested that it would be helpful if the councilors and various county society officers would send in to headquarters office clippings of any news items that might appear regarding these debates.)

**Dr. A. M. Mitchell**, chairman, Committee on Secretaries' Conference, asked the councilors to contact the county society secretaries in their respective districts, urging them to be present at the secretaries' conference on Sunday, February 2, at the Columbia Club, Indianapolis. "Everybody is welcome to attend. The secretaries should attend this meeting so they will know what is going on in the state and also will know what is going on nationally. . . . It has been the opinion of the Committee on Secretaries' Conference that the course in medical economics and medical ethics which is given in the last semester of the senior year is not enough. By the time a medical student has reached that place in his medical education he has pretty much his own ideas. We feel that the University should extend this course so that it starts in the sophomore year."

**Dr. J. W. Hilbert**, chairman, local Committee on Arrangements for South Bend session. "The St. Joseph County Medical Society requests the Council of the Indiana State Medical Association to appropriate \$450.00 in addition to the \$400.00 appropriated in accord with the By-Laws to pay for the expenses of the next convention to be held in South Bend."

**Dr. Van Buskirk**: "I move that the request be complied with." Motion seconded and carried unanimously.

## EXECUTIVE SESSION FOLLOWING LUNCHEON

**1936 Session at South Bend.** Dr. Romberger moved that the scientific exhibit be continued; motion seconded and carried.

It was taken by consent that professional medical stenographers should be employed for this session and that the same arrangement as has prevailed in the last few years in using the headquarters personnel in taking notes on some of the meetings be continued.

The secretary called attention to Chapter IV, Section 2, of the By-Laws, which reads as follows: "The names of duly elected delegates and alternates from each component society shall be sent to the Executive Secretary of this Association annually on or before June first prior to the annual session at which such delegates are to serve."

## MEMBERSHIP PROBLEMS

## 1. Membership Report by Districts.

## MEMBERSHIP REPORT

## INDIANA STATE MEDICAL ASSOCIATION

December 31, 1935

County Society		*No. M.D.s. in County	Members Dec. 31, 1935	Members Dec. 31, 1934	Loss-Gain	Eligible Non-Members	New Members	Removed and Retired	Deceased	Ineligible
<b>1st District—</b>										
Posey .....	23	13	14	-1	4	...	3	2	2	
Vanderburgh .....	155	103	94	9	32	12	15	2	3	
Warrick .....	19	7	6	1	3	1	4	...	...	
Spencer .....	18	8	12	-4	7	2	3	1	...	
Perry .....	12	9	7	2	3	1	...	...	...	
Gibson .....	31	24	24	...	1	...	6	...	...	
Pike .....	11	6	6	...	4	...	...	1	...	
Total.....	269	170	163	7	59	14	30	4	7	
<b>2nd District—</b>										
Knox .....	60	35	34	1	18	2	3	2	2	
*Daviess-Martin .....	33	23	23	...	6	...	3	...	1	
Sullivan .....	27	22	22	...	2	...	2	...	1	
Greene .....	25	16	16	...	6	1	1	1	...	
Owen .....	12	8	9	-1	4	1	...	...	...	
Monroe .....	40	34	30	4	4	2	...	2	2	
Total.....	197	138	134	4	40	6	9	5	7	
<b>3rd District—</b>										
Lawrence .....	31	23	23	...	1	1	6	2	...	
Orange .....	21	15	17	-2	3	1	3	...	...	
Crawford .....	9	3	1	2	6	...	...	...	...	
Washington .....	12	8	10	-2	2	...	1	1	1	
Scott .....	8	4	2	2	...	1	3	...	1	
Clark .....	28	16	15	1	7	3	2	3	...	
*Floyd .....	51	38	40	-2	5	...	1	6	4	
Harrison .....	10	5	5	...	...	5	...	...	...	
Dubois .....	19	14	13	1	4	...	1	...	...	
Total.....	189	126	126	...	28	6	22	11	6	
<b>4th District—</b>										
Brown .....	35	25	24	1	5	2	1	2	3	
Bartholomew .....	23	17	17	...	6	1	...	1	...	
Decatur .....	21	16	17	-1	3	...	...	...	2	
Jackson .....	12	7	7	...	1	5	...	1	...	
Jennings .....	19	12	12	...	5	...	1	1	...	
Ripley .....	28	20	20	...	3	1	5	...	...	
Jefferson .....	6	6	6	...	...	...	...	...	...	
Switzerland .....	23	16	16	...	1	2	...	5	...	
Dearborn-Ohio .....	167	119	119	...	22	6	14	3	11	
Total.....	211	167	162	5	25	6	6	6	10	
<b>5th District—</b>										
*Parke .....	40	26	22	4	9	...	4	...	1	
Vermillion .....	21	16	16	...	2	...	3	1	...	
*Putnam .....	128	114	109	5	6	6	2	2	6	
Clay .....	22	11	15	-4	8	...	1	2	...	
Total.....	235	171	164	7	28	7	16	7	15	
<b>6th District—</b>										
Hancock .....	21	18	19	-1	2	...	1	1	...	
*Henry .....	41	36	28	8	...	5	1	2	2	
*Wayne-Union .....	82	54	53	1	12	1	5	1	11	
Rush .....	25	19	20	-1	5	1	...	1	...	
Fayette- Franklin .....	29	21	19	2	1	...	4	1	2	
Shelby .....	37	23	25	-2	8	...	5	1	...	
Total.....	4066	2800	2741	59	761	126	251	102	193	

County Society		*No. M.D.s. in County	Members Dec. 31, 1935	Members Dec. 31, 1934	Loss-Gain	Eligible Non-Members	New Members	Removed and Retired	Deceased	Ineligible
<b>7th District—</b>										
*Hendricks .....	31	19	19	...	...	5	1	3	2	3
Marion .....	776	484	478	...	6	209	18	27	11	46
*Morgan .....	32	17	17	...	...	10	...	4	1	...
Johnson .....	29	7	7	...	...	15	...	1	5	1
Total.....	868	527	521	6	239	19	35	19	50	
<b>8th District—</b>										
Madison .....	95	69	63	6	16	5	5	2	3	
*Delaware- Blackford .....	99	66	63	3	26	9	3	1	1	3
Jay .....	25	15	14	1	8	...	1	1	1	...
*Randolph .....	29	22	21	1	3	...	4	1	1	...
Total.....	248	172	161	11	53	14	13	5	6	
<b>9th District—</b>										
Benton .....	16	14	14	...	...	...	...	2	...	
*Fountain- Warren .....	22	19	20	-1	1	...	...	2	...	
*Tippecanoe .....	92	83	78	5	5	4	3	...	1	
*Montgomery .....	47	30	30	...	...	6	2	11	...	...
Clinton .....	39	22	20	2	7	...	4	2	4	
Tipton .....	18	10	11	-1	6	...	2	...	...	
Boone .....	24	15	13	2	5	1	2	1	1	1
Hamilton .....	30	21	23	-2	2	...	4	1	2	2
*White .....	12	3	4	-1	7	...	1	...	1	1
Total.....	300	217	213	4	39	7	27	6	11	
<b>10th District—</b>										
*Lake .....	259	191	192	-1	49	11	8	5	8	
Porter .....	26	20	23	-3	4	...	2	...	...	
Jasper-Newton .....	26	13	11	2	9	...	4	...	...	
Total.....	311	224	226	-2	62	11	14	5	8	
<b>11th District—</b>										
Carroll .....	24	21	22	-1	5	1	2	2	1	
Cass .....	51	38	39	-1	5	...	4	2	2	
*Miami .....	38	23	24	-1	13	...	...	2	...	
Wabash .....	36	26	28	-2	6	1	3	2	...	
Huntington .....	35	24	21	3	6	...	2	1	2	
Howard .....	45	30	31	-1	4	...	4	1	6	
Grant .....	83	50	47	3	19	5	6	2	6	
Total.....	302	212	212	...	53	7	21	10	19	
<b>12th District—</b>										
LaGrange .....	13	9	8	1	...	1	4	...	...	
Steuben .....	22	11	10	1	9	1	2	1	...	
*Noble .....	29	27	25	2	5	...	1	1	...	
DeKalb .....	32	22	22	...	5	2	3	1	1	
Whitley .....	17	10	10	1	1	...	4	...	2	
*Allen .....	199	144	133	11	28	7	7	3	20	
Wells .....	25	15	16	-1	7	1	1	1	1	
Adams .....	23	19	18	1	2	...	1	1	1	
Total.....	360	257	242	15	54	12	22	8	25	
<b>13th District—</b>										
LaPorte .....	66	44	48	-4	12	...	9	1	...	
St. Joseph .....	173	134	133	1	21	4	6	4	10	
*Elkhart .....	77	66	66	...	5	2	2	5	2	
Starke .....	...	...	...	...	...	...	...	...	...	
Pulaski .....	10	4	4	...	5	...	1	...	...	
Fulton .....	19	12	11	1	5	2	1	1	...	
*Marshall .....	34	20	18	2	11	2	...	...	3	
Kosciusko .....	30	20	18	2	4	1	3	2	3	
Total.....	409	300	298	2	63	11	22	13	18	
<b>SUMMARY BY DISTRICTS</b>										
1st District.....	269	170	163	7	59	14	30	4	7	
2nd District.....	197	138	134	4	40	6	9	5	7	
3rd District.....	189	126	126	...	28	6	22	11	6	
4th District.....	167	119	119	...	22	6	14	3	11	
5th District.....	211	167	162	5	25	5	25	6	6	10
6th District.....	235	171	164	7	28	7	28	7	15	
7th District.....	868	527	521	6	235	19	35	19	50	
8th District.....	248	172	161	11	53	14	13	5	6	
9th District.....	300	217	213	4	39	7	27	6	11	
10th District.....	311	224	226	-2	62	11	14	5	8	
11th District.....	302	212	212	...	53	7	21	10	19	
12th District.....	360	257	242	15	54	12	22	8	25	
13th District.....	409	300	298	2	63	11	22	13	18	
Total.....	4066	2800	2741	59	761	126	251	102	193	

\*Physicians are listed in the counties in which they hold membership; not in the counties in which they reside.

**2. Counties where there are no societies—Brown and Starke.** Dr. Christophel reported that the condition was very much the same in Starke County. Several of the physicians belong to adjacent county medical societies. He suggested that Starke County might join some county, making a joint society.

#### ANNUAL SESSION OF AMERICAN MEDICAL ASSOCIATION

It was taken by consent that the Executive Secretary should attend the annual session of the American Medical Association which will be held in Kansas City from May 11 to May 15, 1936.

#### NEW BUSINESS

**1. Contract with editor of THE JOURNAL.** Formal contract, prepared by the attorney of the Association, was signed by Dr. Shanklin, editor of THE JOURNAL, and Dr. Alexander, chairman of the Council.

**2. Liquor advertising in THE JOURNAL.** The Council went on record against accepting liquor advertising for THE JOURNAL.

**3. Diphtheria immunization.** Dr. McKain told of the plan of the Columbus physicians and the American Legion for conducting a diphtheria immunization campaign and asked if the State Association would sanction such a move. It was the consensus of the Council that matters such as this are purely local and each county medical society should handle its own case. Dr. Romberger made a motion to this effect, which was seconded by Dr. Christophel and carried.

**4. Course in medical economics and ethics.** Dr. C. J. Clark said that it seemed to him that the time devoted to this course, which is given in the last half of the senior year in the Medical School, is quite insufficient. He moved that "the Council suggest that this course be enlarged to start in the junior year and be continued during the remainder of the Medical School course." Dr. Wadsworth seconded the motion and it was carried.

#### ELECTIONS FOR 1936

**1. Alternate delegate to the A. M. A. meeting for Dr. Cameron.** Dr. Romberger nominated Dr. George Dillinger of French Lick. Dr. Forster moved that the nominations be closed. Motion seconded by Dr. Wadsworth and carried. Unanimous vote of the Council cast by the secretary for Dr. Dillinger for alternate delegate to Dr. Cameron during 1936 and 1937.

**2. Two members of Executive Committee for 1936.** Dr. C. J. Clark nominated Dr. Cleon A. Nafe to fill the place of Dr. William Kennedy, resigned. Dr. Forster moved that the nominations be closed and that the secretary cast the unanimous vote of the Council for Dr. Nafe. Motion seconded and carried. Unanimous vote cast by the secretary.

Dr. Van Buskirk nominated Dr. Wheeler to succeed himself. Dr. Perry nominated Dr. Carl McCaskey. Dr. Christophel moved that the nominations cease. Motion seconded and carried. Upon balloting, Dr. Wheeler was elected.

**3. Chairman of Council.** Upon the motion of Dr. Forster, seconded by Dr. C. J. Clark, Dr. O. O. Alexander was unanimously re-elected chairman of the Council for 1936.

There being no further business, the meeting was adjourned.

**THOMAS A. HENDRICKS,**  
Executive Secretary.

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#### EXECUTIVE COMMITTEE

January 5, 1936.

Meeting called to order at 10:30 a.m.

Roll call showed the following present: W. H. Kennedy, M. D.; H. H. Wheeler, M. D.; O. O. Alexander, M. D.; R. L. Sensenich, M. D.; E. D. Clark, M. D.; A. F. Weyerbacher, M. D.; Albert Stump, attorney, and T. A. Hendricks, executive secretary.

Minutes of the meeting of November 24 approved.

Bills were presented for approval, and the monthly statements of receipts and expenditures and reports of the budget for the Association committees and The Journal for November and December were made.

#### Membership Report

Number of members Dec. 31, 1935.....	2,800
Number of members Dec. 31, 1934.....	2,741

Gain in 1935..... 59

Number of members Jan. 4, 1936.....	603
Number of members Jan. 4, 1935.....	501

Gain over last year..... 102

#### Indiana Annual Non-Profit Corporation Report

Mr. Stump, attorney for the Association, is of the opinion that such a report should be filled in and filed.

#### 1936 Meeting at South Bend

(1) Preliminary visit by executive secretary. Secretary made a report in regard to his preliminary visit to South Bend. Official report of Dr. D. A. Bickel, general chairman of convention arrangements, is to be made at the midwinter meeting of the Council.

(2) Columbia Club (Jefferson Plaza), South Bend, chosen as convention headquarters.

#### (3) Scientific exhibit.

(a) X-Ray Display. Dr. E. D. Clark, president-elect, said that he had the word of the x-ray men that their part of the scientific exhibit will be set up by the time the convention opens.

(b) Dr. Sensenich reported that a display would be sponsored by Notre Dame University showing the recent work of the university laboratories in which various experiments have been conducted upon guinea pigs.

(4) Entertainment. Trips are to be arranged for visiting the art galleries at St. Mary's and Notre Dame, the Bendix Aviation Corporation, and the Studebaker Corporation.

#### Legislative and Legal Matters

(1) Special session of legislature. The committee was of the opinion that the State Medical Association should keep close watch upon the state bills which are drawn up to be presented at the special session if and when such a special session is to be held.

#### Socialization of Medicine

##### (1) High school debates.

(a) Map has been prepared showing distribution of material to high school debaters, debate coaches, physicians and laymen. To date 112 physicians, 104 coaches, 64 high school students and 13 laymen have received this material and requests are still coming into headquarters office for this information.

(b) Purchase of additional debate material. The committee authorized the purchase of 500 pamphlets each of the Wisconsin and Minnesota state outlines.

(2) Report of Dr. R. G. Leland, director of the Bureau of Medical Economics of the American Medical Association, upon the American Foundation Studies in Government brought to the attention of the committee. The report indicates that the American Foundation Studies in Government is a bona fide organization making an honest effort to obtain facts concerning medical services and medical practices in this country.

#### Social Security Act

(1) Position of liaison officer in Dr. Harvey's office still unfilled.

(2) Letter from Dr. Harvey in regard to the publication of a pamphlet upon obstetrics brought to the attention of the committee. Dr. Harvey states that in his opinion the publication of such a pamphlet could be financed with funds that are to be allotted to Indiana for public health work through the Social Security Act.

#### Health Insurance and Group Hospitalization

New activity to establish group hospitalization in various parts of the state developing in Indiana. Agitation in Fort Wayne and some inquiries made at headquarters office concerning development of such plans in this state reported to the committee.

#### Indigent Sick

Special liaison committee appointed which met with a similar committee from the Township Trustees' Association on November 26. This committee sent questionnaires to county society secretaries, a number of which have been returned. These questionnaires are to be turned over to Dr. F. S. Crockett, chairman of the committee.

#### Midwinter Council Meeting, January 12, 1936

(1) The committee went over the list, signifying the committee chairmen and other officials who should be invited

to attend the luncheon meeting of the Council.

(2) Councilor maps. The committee authorized the purchase and preparation of a small map for each councilor.

#### Graduate Education

(1) Dr. C. J. Clark, chairman of the Committee on Graduate Education, appeared before the committee and outlined the plans for the spring conference and for the county society programs that are to be held previous to the conference.

(2) Tentative date. Two-day session the last week in May.

(3) Question in regard to financing this meeting brought to the attention of the committee.

(4) Dr. Gatch to be asked to attend the next meeting of the Executive Committee, at which time details for the spring conference are to be completed.

(5) Members of the Committee on Graduate Education to be made responsible for the organization of certain districts of the state in order that programs may be held on neoplastic and cardiovascular diseases.

#### American Red Cross First Aid Stations

Letter received from Dr. D. R. Ulmer, chairman of the Regional Fracture Committee of the American Red Cross, stating that all secretaries had been asked to call for volunteers and appoint all men who desired to serve in the various counties in highway emergency accident work.

#### Immunization Campaign

A signature card such as is used in Columbus, Indiana, was brought to the attention of the committee at the request of a Columbus physician. The committee felt that such a card was very good.

#### Ohio State Medical Association Resolution

Resolution of the Ohio State Medical Association in regard to a course in medical economics to be given to medical students brought to the attention of the committee. The committee pointed out that a course of lectures upon such subjects had been instituted in Indiana for several years.

#### Workmen's Compensation Insurance for Headquarters Office

Investigation of classification of the employees of the State Association at the headquarters office has resulted in a change in classification accompanied by a lower rate.

#### Prevention of Traffic Accidents

Letter from Dr. M. N. Hadley, chairman of the Committee on Prevention of Traffic Accidents, asking what the scope of the work of this committee should be, brought to the attention of the committee. The Executive Committee felt that the Association should become interested and take an active part in the campaign against automobile accidents.

#### The Journal

(1) **Journal contract for printing.** Upon the motion of Dr. Clark, seconded by Dr. Alexander, the committee authorized the immediate change of **The Journal** from the Qualityprint, Inc., at Shelbyville, a non-union shop which was given a one month's trial, to the company which made the next lowest bid, The Evans Printing Company, a 100% union shop, for a month's trial. This change was made in order that **The Journal** may be published by a union shop.

(2) Editorial which appeared in **The Union**, the official labor paper, brought to the attention of the committee.

(3) The cost of printing **The Journal** under the new contract will be considerably increased if the same number of pages are printed in 1936 as were printed in 1935.

#### BUREAU OF PUBLICITY

November 22, 1935.

Meeting called to order at 3:30 p. m.

Present: William N. Wishard, M. D., chairman; E. D. Clark, M. D., and T. A. Hendricks, executive secretary.

Requests for speakers:

December 4—Sullivan County Medical Society, Sullivan, Ind. Speaker obtained.

February 14 or 18, 1936—Sullivan County Medical Society, Sullivan, Ind. Speaker to be obtained.

December 7—Lawrence High School, Lawrence, Ind. Physician obtained to talk on "The Pre-School Child" to grade school teachers.

Reports on medical meetings:

October 30—Vigo County Health Educational Exhibit, Terre Haute. "Heart Disease, a Public Problem." (Fifty present.)

October 31—Vigo County Health Educational Exhibit, Terre Haute. "Dangerous Drugs and Cosmetics." (Three hundred present.)

November 1—Vigo County Health Educational Exhibit, Terre Haute. "Good Health Habits." (One hundred present.)

Letter received from the field representative of the American Society for the Control of Cancer in regard to the Vigo County health educational exhibit brought to the attention of the bureau.

Representatives of an Indianapolis newspaper which is contemplating the promotion of a health advertising campaign, which is to be paid for by manufacturers and various commercial firms of the city, presented their campaign plans to the Bureau of Publicity. The bureau was impressed with the high quality of the material presented, but it reiterated its stand that it could not give official approval to this campaign because basically it will be commercial in nature. The secretary was instructed to write a letter to the president of the State Medical Association submitting the facts in regard to the campaign to him and informing him of the position of the bureau.

The president-elect of the State Association has expressed a desire that the scope of the work of the bureau be broadened. The chairman of the bureau asked that the president-elect send a communication to the bureau giving in detail his suggestions.

\* \* \*

December 12, 1935.

Meeting called to order at 3:30 p. m.

Present: William N. Wishard, M. D., chairman; E. D. Clark, M. D.; J. H. Stygall, M. D., and T. A. Hendricks, executive secretary.

Release, "Relation of Environment to Disease," reviewed by the bureau. Corrections suggested and article to be rewritten for further consideration of the bureau at its next meeting.

Requests for speakers:

December 10—Knox County Medical Society, Vincennes, Ind. Speaker obtained to talk on "Something New in Obstetrics."

January 14—Tippecanoe County Medical Society, Lafayette, Ind. Speaker desired to talk on "Later Facts About Cancer."

Any time between January 15 and February 1—Business and Professional Women's Club, Muncie, Ind. Speaker desired to talk on "Sickness Insurance."

Letter received from the Delta County Medical Society, Colorado, thanking the bureau for the material sent to it in regard to the work of the Indiana State Bureau of Publicity.

The following letter was received by the bureau from the chairman of the Judicial Council of the American Medical Association in answer to a letter which was sent to the American Medical Association asking for information concerning contemplated rulings of the Council in regard to certain phases of medical ethics:

"Dr. West has sent me copy of your communication to him of November 20 and his reply to you. I am very glad indeed to find that you have a committee that is considering some of the subject matter which the Judicial Council covered in its last report. The Judicial Council has not prepared any detail which we can use in the changes that we suggested in the Constitution and By-Laws giving original jurisdiction to the State Associations and to the American Medical Association.

"I am very much pleased to find that your Bureau of Publicity is giving consideration to this matter, and it would be very helpful to the Judicial Council if we might receive from your bureau particular suggestions of situations—first that they know of and secondly which they think may be imminent of conditions which would be such as would be intended to apply in the revision to be made. There might be no special hurry about this as the first item which the Judicial Council is taking up and which will occupy some of its time, is another portion of the report suggesting closer co-operation between the Council on Medical Education and Hospitals and the Judicial Council, which would be a part of the general situation

which the House of Delegates evidently thinks warrants a revision. I would appreciate it very much, however, if I might have the data asked for at sometime in January as early in the month as possible. The House of Delegates gave the Judicial Council a considerable amount of interim work on which they must report at the next annual meeting, and I anticipate that we will finish up with the Council on Medical Education and Hospitals sufficiently so that we will be ready to take up the more general problems shortly after the first of the year. If your Bureau of Publicity will be kind enough to give this matter consideration and report to the Council it would be very helpful and we would appreciate it very much."

The bureau instructed the secretary to answer the letter stating that it had no suggestions, but would be very much interested in seeing the report that the Council makes to the American Medical Association.

Letter received from the American Birth Control League, New York City. The secretary was instructed to write the league stating that the bureau felt that the undertaking of the Birth Control League was unwise and undesirable.

Article which appeared in the December issue of the *Indiana Parent-Teacher*, entitled "This Matter of Vitamins," approved by the bureau.

The bureau discussed the suggestion of the president (1936) of the State Association that the bureau prepare articles for newspaper release which deal with the economic and social side and significance of disease. A letter from the president states, "I think it might be well to spread out your articles as much as possible by separation into articles covering individual diseases where that is justified, and also considering the effect of housing, nutrition and employment separately." The secretary was instructed to write a letter to the State Division of Public Health asking for any economic data that the division director may have in regard to disease.

\* \* \*

December 19, 1935.

Meeting called to order at 3:30 p.m.

Present: William N. Wishard, M.D., chairman; E. D. Clark, M.D., and T. A. Hendricks, executive secretary.

Release, "A Merry Day After Christmas," approved for publication December 23.

Copy of the proposed release, "The Relation of Environment to Disease," sent to the president of the State Association for review.

Report on medical meeting:

December 10—Knox County Medical Society, Vincennes, Ind. "Something New in Obstetrics." (Thirty present)

Newspaper clippings of questionable ethical nature brought to the attention of the bureau. The secretary was instructed to write the following letter to the officers of the county society, the names of whose members are mentioned repeatedly in these clippings:

"The bureau of Publicity of the Indiana State Medical Association subscribes to a clipping service which brings to it newspaper articles that appear in almost every daily and weekly newspaper in the state. The bureau recently has received a number of clippings from the ..... newspaper covering a period of the last two or three months. These items relate to sickness and accidents and in each case give the name of the physician who has performed an operation or attended the patient. The names of four or five members of the ..... County Medical Society occur time after time in these news items. The names of two of them are mentioned eight times each; two others are mentioned six times each, and still others are mentioned several times.

"The bureau calls your attention to the Principles of Medical Ethics of the American Medical Association, the code which has been accepted by the Indiana State Medical Association, of which the ..... County Medical Society is a component member. It is the opinion of the bureau that such clippings as have been received are in all cases most objectionable and are not in harmony with the Principles of Medical Ethics which time and again have been approved officially by the House of Delegates of the Indiana State Medical Association.

"The bureau is not referring this matter at the present time to the Council of the Indiana State Medical Association, which meets in January, but it is giving the ..... County Medical Society an opportunity to take whatever action it deems proper which will result in the discontinuance of the objectionable feature of having physicians' names mentioned over and over again in the newspaper in connection with the care of their patients.

"The bureau recognizes that in occasional cases a physician is not responsible for the publication of his name, but that newspaper reporters obtain the name of the physician from laymen and members of the family of the patient. The bureau is conveying this information to the ..... County Medical Society with the suggestion that the bureau be relieved of the necessity of calling the attention of the Council to these clippings, which are a plain violation of the Principles of Medical Ethics. The bureau therefore suggests that a resolution be passed by the ..... County Medical Society and officially signed by the president and the secretary of that society, requesting the newspapers of ..... County to omit the names of physicians in their publication of articles concerning cases of illness or accident. By such action the Bureau of Publicity and the Council will be greatly relieved and the members of the ..... County Medical Society will be saved any embarrassment.

"The bureau will be pleased to receive a copy of any resolution or action taken by your society."

Correspondence from the Chicago Medical Society in regard to the advertisement entitled "Warren Health Communities, Inc." brought to the attention of the bureau. The bureau suggested that the secretary write to the physician whose name was used in this advertising, asking him for information concerning such advertisement.

\* \* \*

December 27, 1935.

Meeting called to order at 3:00 p.m.

Present: William N. Wishard, M.D., chairman; E. D. Clark, M.D.; J. H. Stygall, M.D., and T. A. Hendricks, executive secretary.

The release, "Housing and Health," approved for publication on Monday, January 6, 1936.

The release, entitled "Relation of Environment to Disease," sent to the president of the Association for his comments and suggestions.

The following letter was received from the director of the Bureau of Health and Public Instruction of the American Medical Association in answer to a request for suggestions concerning the economic phases of illness:

"I do not know exactly what I could send you in response to your letter of December 17, except material which is already available to you. Articles in *The Journal* and the *A. M. A. Bulletin* can be quoted or material from them rewritten for public presentation through the lay press. Since you already have *The Journal* and the *Bulletin* there would be no point in having the material sent you from here.

"In addition I would suggest that whoever writes your articles keep in close touch with *Hygeia* and with the publications of the various A. M. A. bureaus as listed in the annual publications of professional and lay catalogs. When you desire material about a particular disease it is necessary only to exercise your privilege of using the Package Library of the American Medical Association, which will send you on request selections of pamphlets and clipped material dealing with the particular phase of the subject in which you are interested.

"I have followed your newspaper releases with great interest for they have been a swell job and I have often mentioned them to other societies."

Notice received from the editor of the *American Journal of Public Health* that the rules adopted by the Bureau of Publicity of the Indiana State Medical Association for speakers addressing lay audiences were to be carried in that *Journal*. These rules follow:

1. The use of scientific terms should be avoided when speaking to a lay audience.

2. Do not talk over thirty minutes unless urged to do so.
  3. Please keep closely to your subject.
  4. Put pep into your talk and speak loud enough for all to hear.
  5. Speakers should arrive at least a few moments before the hour announced.
  6. It is suggested that speakers endeavor to present the composite view of the profession in their addresses to the public.
  7. It is advisable to avoid citation of personal case reports.
  8. Please aid the Bureau of Publicity in its efforts to make all presentation of its work as impersonal as possible.
- \* \* \*

**INDIANA STATE DIVISION OF PUBLIC HEALTH  
BUREAU OF COMMUNICABLE DISEASES  
MONTHLY REPORT, DECEMBER, 1935**

	Dec.	Nov.	Oct.	Dec.	Dec.
	1935	1935	1935	1934	1933
Tuberculosis .....	135	125	171	211	101
Chicken pox .....	492	407	226	663	741
Measles .....	53	41	50	975	870
Scarlet fever .....	914	682	624	949	248
Smallpox .....	13	11	6	9	15
Typhoid fever .....	13	11	26	19	13
Whooping cough .....	185	130	100	197	199
Diphtheria .....	207	201	470	202	291
Influenza .....	142	104	103	189	187
Pneumonia .....	133	72	74	75	42
Mumps .....	163	103	78	12	38
Poliomyelitis .....	1	9	13	10	3
Meningitis .....	17	6	8	2	7
Septic sore throat.....	6	0	0	4	0
Tularemia .....	2	0	0	1	0
Encephalitis .....	1	0	1	2	2
Trachoma .....	1	0	0	0	0

**BOOKS RECEIVED**

**ESSENTIALS OF PSYCHOPATHOLOGY.** By George W. Henry, Associate Professor of Psychiatry, Cornell University Medical School, New York; attending psychiatrist, The New York Hospital, New York City. 312 pages. Cloth. Price \$4.00. William Wood and Company, Baltimore, 1935.

\* \* \*

**FUNDAMENTALS OF BIOCHEMISTRY IN RELATION TO HUMAN PHYSIOLOGY.** By T. R. Parsons, B.Sc., M.A., Sidney Sussex College, Cambridge. Fifth edition. 453 pages. Cloth. Price \$3.00. William Wood and Company, Baltimore, and W. Heffer and Sons, Ltd., Cambridge, England, 1935.

\* \* \*

**AIDS TO MEDICINE.** By James L. Livingstone, physician to King's College Hospital; assistant physician to the Hospital for Consumption and Diseases of the Chest, Brompton. Fifth edition. Cloth. 422 pages. Price \$1.50. William Wood and Company, Baltimore, 1935.

\* \* \*

**GLANDULAR PHYSIOLOGY AND THERAPY.** A symposium prepared under the auspices of the Council on Pharmacy and Chemistry of the American Medical Association. 528 pages. Flexible binding. Price \$2.50. The American Medical Association, Chicago, 1935.

\* \* \*

**THE SPECIAL PROCEDURES IN DIAGNOSIS AND TREATMENT.** An Outline for their Understanding and Performance. By Don Carlos Hines, M. D., Clinical Instructor in Medicine, Stanford University. 66 pages. Paper with spiral wire binding. Price \$1.00. Stanford University Press, California, 1935.

\* \* \*

**THE NATIONAL FORMULARY.** Sixth edition. National Formulary VI. Prepared by the Committee on National Formulary by authority of the American Pharmaceutical Association. Official from June 1, 1936. 556 pages. Published by the American Pharmaceutical Association, Washington, D. C., 1935.

\* \* \*

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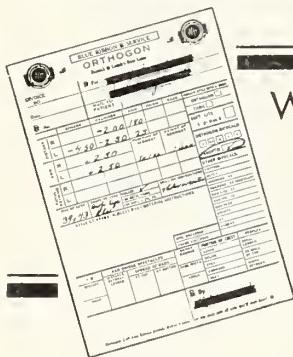
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# THE JOURNAL

OF THE

## INDIANA STATE MEDICAL ASSOCIATION

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VOLUME 29

MARCH, 1936

NUMBER 3

### ORIGINAL ARTICLES

#### THE TEACHING VALUE OF RECORDS \* 1

RALPH M. WATERS, M.D.  
MADISON, WISCONSIN

Early in my professional life I chanced to fall into an argument with a surgeon as to the relative merits of ether and nitrous oxide as related to

safety. He assured me that he had never lost a patient on the table during his twenty years of experience and that it was because he had always used ether. Since it was important for my own satisfaction either to verify or disprove this statement, my spare moments during the next year were spent in either written



Ralph Waters, M.D. or spoken interviews with this surgeon's former assistants and available members of his surgical team during the twenty years in question. The result was the establishment of positive evidence of five such deaths. Since the surgeon was a personal friend of mine, known to me to be absolutely honest, the experience strongly impressed upon me a very important circumstance; namely, that one's memory is a very poor vehicle on which to rely as a source of facts. I resolved to attempt, at least throughout my professional life, to avoid making statements based on memory. Among scientific people, statements and even opinions seldom carry much weight when they are not backed by carefully

recorded, controlled experimentation. Although clinical effort can perhaps not always be accompanied by controlled experimentation in every case, clinical experience can always be recorded.

Anesthesia in America at the present time is to an extent "in the spotlight." A need for better service in anesthesia is felt by the surgeon, the remaining members of the hospital staff, the patient and the hospital management. Are they getting better service this year than last? Without records, no one can say. A discussion of the advantages derived from records by the various individuals concerned should begin with the anesthetist.

#### THE ANESTHETIST

Although I have heard a surgeon object to the record keeping of his anesthetist because the effort detracted his attention from his patient, I feel certain that intelligent observation of any experienced anesthetist while record keeping at the operating table will convince the most critical surgeon that keeping a careful record of occurrences as they appear serves definitely to concentrate the anesthetist's attention on his patient. Only by means of records of preoperative condition, effects of anesthesia and operation while the patient is subject to them, and a careful follow-up of postoperative morbidity can the anesthetist determine whether his effort of this year is an improvement over last year or not. No greater aid is available to the anesthetist than a review of these records to determine what is the best choice of agent or method in a given case. Impressions based on memory are apt to be erroneous. In the operating room, one may choose the method or drug which is most convenient or the easiest to use, whereas records may prove that a more cumbersome method or a more expensive drug gives, in his hands, better results. The figures as published by another anesthetist are not a reliable criterion. We have found that the skill and dexterity of different individuals, on the same hospital service and undergoing the same course of instruction, vary markedly with different drugs and

\* From the Department of Anesthesia, University of Wisconsin Medical School.

<sup>1</sup> Presented before the Section on Anesthesia of the Indiana State Medical Association at the Gary session, October 9, 1935.

methods. Statistics covering a small number of cases of one's own, therefore, are more useful by far than those covering thousands of cases in the experience of another.

The basic principles of physiology, pharmacology, and biochemistry are the foundation stones of anesthetic teaching, it is true, but one's statements in the classroom and clinic to undergraduate and graduate students alike are greatly emphasized by accounts of results as gleaned from careful records. A beginner in the art of anesthesia can be supervised, guided, and corrected only if he is recording from minute to minute his technical maneuvers and the changing results. Unless the student is required to record constantly what he sees in changing physical condition and results, he will seldom have fixed in his mind the many facts of which he may have been told in the lecture room.

#### THE SURGEON

The most futile argument in the world is carried on between two doctors in regard to the effect of a therapeutic procedure during and following which neither has ever kept records. A surgeon is too often apt to judge of the therapeutic excellence of anesthesia by, for instance, the flaccidity of muscles. The anesthetist is too often apt to use, as the criterion, ease of administration. If the records show that a given anesthetist can use a drug to produce absolute flaccidity of the muscles of every patient to the complete convenience of the surgeon without increase in postoperative morbidity, that should settle the argument until the figures tell another story. On the other hand, if the records show that in a given group of cases in which maximum flaccidity has been maintained throughout operation as compared with a similar group where the surgeon has been slightly embarrassed or delayed because of insufficient relaxation, show less postoperative morbidity in the latter group, it may be that the surgeon will feel that the better postoperative results warrant toleration of the inconvenience. Memory, however, supplies too undependable evidence upon which to base such a decision. There can be no final settlement of such arguments. Reconsideration of statistical analyses each year must be made to settle arguments and determine the future action of all members of the surgical team. Once the surgeon appreciates that the anesthetist bases his use of agents and methods on definitely recorded previous experience, many arguments and misunderstandings will be avoided.

#### THE REMAINDER OF THE STAFF

The general practitioner or internist and the admitting officer or hospital superintendent are interested in the compilation of records for their prognostic value. In deciding upon what to recommend to a given patient, the average experiences of previous patients to whom similar operative

procedures have been recommended in the past is useful. If a woman who contemplates a hysterectomy asks, "Will I be nauseated afterward?" and they can reply, "Last year, Madam, twenty-five out of every hundred women undergoing such an operation in this hospital were nauseated during the first day, eight of whom vomited not more than twice, and two were both nauseated and vomited for more than three days severely," the woman has been rendered a real service.

#### THE HOSPITAL

The business office is interested in the length of time the various drugs are administered as compared with the cost of these agents. If a change in method can be shown to result in marked reduction in cost, without increase in morbidity or inconvenience to patients, surgeons, or the members of the staff, then the management may willingly advance money for providing such equipment.

#### WAYS AND MEANS

First may I say that any system of record keeping will require effort. Records will not keep themselves. Carelessly kept or inaccurate records are scarcely better than none. To be of value, negative as well as positive findings must always be recorded. A simple system, well and accurately carried out, is more useful than an elaborate one incompletely or carelessly conducted. A record system must be chosen that is fitted to the personnel available. Some of the most efficient anesthesia records are probably kept in the anesthetist's hip pocket.

At the Wisconsin General Hospital, we have used record sheets from which information is transferred to Hollerith punched cards<sup>1</sup>. This has the advantage of greatly simplifying the sorting and compilation of information. Manifestly one's private cases or the work in a small hospital could be compiled easily by hand.

The figures compiled from the records of a large hospital are not thought to have any particular value as a general yardstick by which to judge the usefulness, safety or applicability of any agent or method under other conditions than those obtaining where the records were made. At the Wisconsin General Hospital, such figures are most valuable in teaching our own students, anesthetists and surgeons. The old statement is quite true, "One can prove anything by statistics." If one elects to give ether to all his "bad risk" cases who are to undergo prolonged and severe operations, reserving other agents for "good risk" patients presenting for minor operations, his statistical evaluation will be very unfavorable to ether. The greatest care is necessary in evaluating figures after they are obtained.

The great value of clinical records, in my esti-

<sup>1</sup> Rovenstine, E. A.: A Method of Combining Anesthetic and Surgical Records for Statistical Purposes, *Anesth & Analg.* XIII:122-128 (May-June), 1934.

mation, does not lie in the publication of the resulting statistics with a hope of benefiting others, but rather in direct benefit to those who keep such records. If the anesthetist must answer the question "Yes" or "No" in regard to each minor factor concerning preoperative condition, occurrences during operation, and during the postoperative hospitalization of every patient, he will of necessity have to observe more carefully and to correlate more accurately, cause with effect. Without accurate recording, the teacher loses a valuable aid in checking his own personal impressions as well as the ability and progress of his students.

1300 University Avenue.

#### DISCUSSION

E. S. SEVENSMA, M.D. (Grand Rapids, Mich.): I fully realize how keenly disappointed you must be not to have our genial John Lundy here, and have to put up with a pinch hitter from the Wolverine state. Dr. Lundy, by his work, is well qualified to discuss a paper of this kind. I understand he had a similar system at the Mayo Clinic for many years.

I am jealous of the Indiana State Medical Association for they have brought about the abolition of nurse anesthetists. We have not come that far; we have not even had our labor pains, but with a little gas anesthesia given to our State Board, I think we ought to be able to expel the baby. I appreciate Dr. Waters' paper. It is very elucidating and very timely, and his suggestions are very necessary.

To make real progress in any field of endeavor, especially in medicine and its allied branches, the first requirement is to put it on a scientific basis and to standardize as much as possible everything connected with it. Although the human body is not a piece of machinery to which we can apply mathematical rules, but has endless variants which must be taken into account constantly, yet it should be our constant aim, by getting data from thousands of cases collected from all over the country, to deduce rules and methods of procedure that shall be accurate and make our technic progressively better.

As stated in the abstract of Dr. Waters' paper, "Bare impressions of any member of the surgical team in regard to the results of a given anesthetic drug or technic are not only faulty but misleading." In the past there has been little concerted effort to gain uniformity in collecting, correlating and reporting anesthesia statistics. One serious difficulty in planning and adopting a satisfactory universal or standard system is lack of a compact record. Such a record should contain accurate positive and negative information, not only of the anesthesia procedure, with such observations as may be related to it, but should correlate the clinical, pre-operative findings, the surgical treatment, and the immediate and remote results. Where comprehensive records are available, the task of

securing and tabulating material from the voluminous case record or anesthetic chart has been monotonous, time-consuming and difficult. The system elaborated and described by Dr. Waters for conveniently recording correlated clinical, anesthetic, surgical and postoperative results certainly is simple, accurate, and of infinite value from a teaching point of view.

In the last decade anesthesia has made such rapid strides with the discovery of new anesthetic agents, with new facts constantly developed by modern methods of research, new methods of producing anesthesia, and ever-changing models of gas machines and appliances, that it has not only been difficult for the average man to keep up but it has led to a state of confusion and bewilderment, so that everyone feels the need of sitting back and taking time off to properly evaluate them all and select the best methods for his technic.

Here and now, this system of recording should prove its value. If men from all over the country will use it and tabulate their results in standardized form, we will soon, from the voluminous statistics and data, be able to deduce new facts which will not be simply "bare impressions" but accurate and reliable figures that will enable us to improve our technic and lower our morbidity and mortality rates. One great advantage of this system, it seems to me, is that we can apply it not only to anesthesia in general, but also to any special field of research. Take for instance the field of spinal anesthesia, which, as we all have to admit, has been in a state of constant flux and experimentation, so that hardly any two men use exactly the same technic in its administration. Think of some of the many factors that have to be considered when giving spinal anesthesia: pre-anesthetic sedative medication, use of ephedrin, length of operation with proper selection of drugs, bore of needle, position of patient on table during and after injection, barbotage, selection of interspace, amount of drug used, rate or force of injection, blood pressure, use of oxygen or CO<sub>2</sub> during operation, methods of treatment for respiratory failure, etc., and we get some idea of the necessity of checking up on ourselves by means of some such system as Dr. Waters has described, so we will have a method that is somewhere near scientific or standard.

If the science and art of anesthesia is to advance further for the benefit of mankind, it must be with the help of the honest, intelligible and uniform reporting of the experiences of all first class hospitals, and by the amassing of all such statistics and records into one great annual report. I sincerely hope that Dr. Waters will continue his pioneer work in that line, and get the Congress of Anesthetists to adopt some standard chart. Then we will get somewhere.

Dr. Waters (closing): In Dr. Schwartz' paper,

oxygen therapy was mentioned. I wish he had said a little more about another thing that we are all prone to neglect, that is, the administering of therapeutic and diagnostic pain relieving drugs.

If one gets the whole staff interested, a lot can be done. If you want to do full-time anesthesia, the surgeon will get to depend on you to help with post-operative care. It would be quite impossible for us at Wisconsin not to have two men on duty all afternoon and evening for various consultations, and I think that should be kept in mind in the general consideration of post-operative care. The anesthetist need not impose his aid in a positive way or a personal way, but in a diplomatic way, and it can be most useful.

Just to give an illustration of the difference in labor in mechanical sorting of records, the fourteen hundred spinal cases (shown on a slide) took one individual's time all afternoon and as much time in the evening as she would devote, for six months. The eight thousand cases, comprising the two yearly reports, were gotten out in much less time, two residents working on them evenings for probably a month. If they had put in full time they could have had them out in much less time than that. It simplifies immensely the work of analysing a larger number of records.

The suggestion of using these cards for things for which they are not designed is excellent. We wanted to get our oxygen therapy records in better shape so we could find out if we were giving oxygen in cases where we need not give it. This is being done in the same way. It has been necessary to make a little transposition of the cards, but it is not necessary to get special cards. So, the system can be used for lots of things.

The suggestion regarding combining the records of the whole country into a group for an annual report is one that is a disputed point. The New England Society of Anesthetists from Boston and Providence, etc., are trying to do that. They started about eighteen months ago to send in all their records to one secretary to let him compile them through that one office, and they have invited others to join them. The decision is much in the air at the present time. I have to confess that I have not taken your stand. I have felt that the records were not useful if combined with somebody else's. For instance, we might look for certain post-operative complications in which the other fellow is not interested. The same agent might not be given in the same way, and I think the way it is given is much more important than the agent. I think the teaching usefulness of records is to the man who keeps the records rather than to others in general. Maybe variations in climate would affect the statistics. It appealed to me at first, but the more I think of it the more I doubt if one can get a satisfactory comprehensive combined system for all hospitals, but I may be wrong.

## GLIMPSES INTO A SURGICAL CLASSROOM OF 1815\*

THROUGH THE NOTEBOOK OF  
ROBERT CRAVENS, M.D.

E. VERNON HAHN, M.D.  
INDIANAPOLIS

Authentic and personal documents which reflect the state of medical knowledge of a previous time are stimulating to one's appreciation of present-day achievement. It would be difficult to imagine a more pointed reminder of the tremendous advance in medicine and surgery since the year 1815 than lecture notes made by a medical student in a leading medical college of that time.

Such a personal record of the medical teaching in the first part of the nineteenth century is the notebook of one Robert Cravens, of Harrisonburg, Virginia, who later moved to Madison, Indiana. After his course of lectures at the University of Pennsylvania, Dr. Robert Cravens took up the practice of medicine at Madison, Indiana. In 1818, he married Sarah Grover Paul, a daughter of Colonel John Paul, the founder of Madison. This notebook, along with other memorabilia, has recently been presented to the library of the Indiana University School of Medicine by Miss Drusilla Cravens, a granddaughter of Dr. Robert Cravens. The notebook was referred to the Bureau of Publicity through the courtesy of Dr. W. D. Gatch, dean of the Indiana University School of Medicine. As will be noted in the reproduction of the title page of Dr. Cravens' notebook, the medical student of that day cultivated an elegance of penmanship which has long since been out of fashion, but which reflects the conscientious and deliberate attitude of the writer.

The notebook, which is the subject of this paper, is devoted chiefly to the lectures on surgery of Philip Syng Physick and of John Syng Dorsey. These two men were famous as practicing surgeons, and are still remembered as leading teachers of their time. Dr. Physick performed an operation on Chief Justice Marshall and Dr. Dorsey was the author of the first American textbook of anatomy.

The importance of these two teachers of Dr. Cravens, in the propagation of medical science in America, is best seen by noting how they form essential links in the chain of medical culture from the time of Boerhaave of the Dutch school. Alexander Monro (1697-1767) was trained by Boerhaave and became professor of anatomy at Edinburgh. Monro taught William Cullen (1712-1790) who founded the Medical School at Glasgow and who in writing "Derangements of the Intellectual Functions," laid the foundations of

\* This article was prepared and published at the request of the Bureau of Publicity of the Indiana State Medical Association.

descriptive psychiatry. After Cullen, William Hunter (1718-1783), John Hunter (1728-1793), and Astley Cooper (1768-1841), in turn picked up the thread of scientific investigation in the spirit of Boerhaave. Astley Cooper taught Philip Syng Physick (1768-1837), who is known today as the "Father of American Surgery." His pupil, John Syng Dorsey, basing his text on the work and methods of Physick, wrote the first American treatise on surgery. Both Physick and Dorsey influenced William Edmonds Horner (1793-1853) who first described the muscle, tensor of the tarsus, known by his name<sup>1</sup>.

The school in which they taught, the successor of the medical department of the College of Philadelphia, was the first school in the United States to grant a diploma for a definite course of study in medicine.

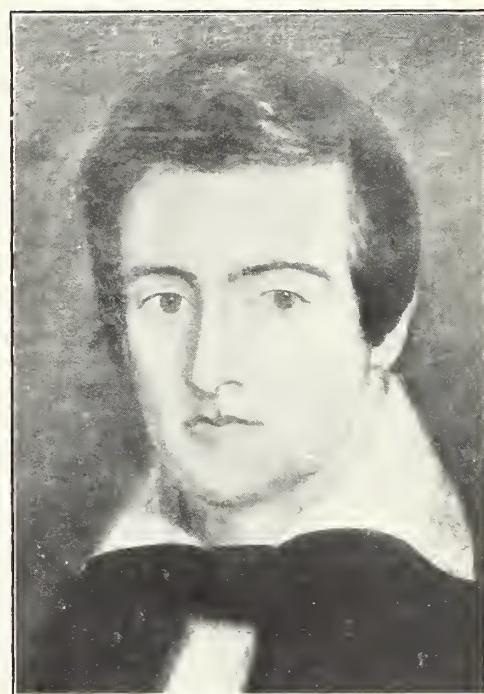
At the time medical student Cravens was so attentively recording the teachings of the day, the school was occupying a building which had been erected in 1792 by the State of Pennsylvania, as a home for the President of the United States, when Philadelphia was the capital of the nation and George Washington was its President.

Some of Dr. Cravens' lecture notes are startling in the way in which they bring to one's realization the pre-antiseptic days of surgery. For instance, in lecture two, which treats "of inflammation," we find the following:

"The simple act of inflammation cannot be considered as a disease, but it is sometimes connected with disease, as in Scrofula, Lues Venerea, etc. I shall, in the first place, begin with observing the nature and effects of inflammation in its different stages. In order to distinguish inflammation, a person should be acquainted with its phenomena. When inflammation is about to commence in a part, there is an increased sensibility in the part, attended with heat, redness, swelling, and pain from the slightest touch. Its remote causes are either chemical, mechanical, or from fevers. The chemical causes are heat, cold, etc. The mechanical are bruises, burns, caustics, issues, setons, and blisters. Inflammation is sometimes a cure in certain diseases. It is excited sooner in some people than in others. I once bled a lady in this city, and having made the orifice larger than I expected (it was half an inch), no inflammation was excited for two or three days. I was, therefore, obliged to keep a compress upon it, to prevent hemorrhage, and in about three or four days, inflammation was excited and it soon healed. If three different persons were each wounded in the same part, from the same cause, and the same treatment pursued in each, they will not heal alike. One will perhaps heal by the first intention; in another, inflammation will be excited in a high degree, and a third will perhaps end in suppuration.

Dr. C. Smith calls that kind of inflammation which attacks the cellular substance, Phlegmonous; that which attacks the skin, Erysipelatous. According to William Hunter, I shall divide inflammation into three kinds . . . ."

The medical student of today may be at a loss to understand some of this discourse on inflammation, unless he is told that issues, setons and blisters were therapeutic measures, employed for the deliberate purpose of exciting inflammation. A strange premonition of the later discovered facts may be seen in the third of Dr. Physick's causes of inflammation, that is, "from fevers." If only Dr. Physick had known what caused the fevers!



*Robert Cravens, M.D.  
1794-1821*

Almost every page of this remarkable notebook records some clinical experience of one or the other of the great surgeons from whom young Robert Cravens was learning the art and science of practice. And these clinical reports are usually beautifully illustrative of some point in the text. As for instance, on the treatment of inflammation:

"The remedies necessary to make use of in the cure of adhesive inflammations, are, 1st such as act generally upon the constitution: these are blood-letting, mercury, purging, low diet, antimonials, diluents and rest; 2nd, such as act locally upon the part itself: these are, local blood-letting (if practicable), scarifications, leeches, and blisters, and an elevated position of the affected part. Bloodletting—this is one of the most powerful remedies in reducing inflammation. The quantity of blood to be drawn should be regulated according to the violence of the inflammation. It

<sup>1</sup> For these explanatory notes, the author is indebted to charts prepared by Dr. Milton Bohrod, formerly of the University of Illinois School of Medicine.

acts in two ways. One, by emptying the blood vessels and diminishing their action; two, by emptying the blood vessels, or by creating nausea, produce sweat, etc. Mercury is a very powerful remedy in reducing inflammation. I was desired to visit a lady some time ago, who had punctured the cornea of her eye with a large darning needle. I treated it at first, with the usual evacuating remedies, viz., bleeding, blistering, purging, and low diet, but without any effect. I then made use of mercury, and as soon as the mouth became sore, the inflammation ceased, and the eye soon got well."

One will note with approval the vigorous use of therapeutic agents, once their appropriateness had been decided upon. On the other hand, our astonishment may be aroused at the meekness with which the patients of that day withstood drastic purgings, salivation, and exsanguination.

## Surgery Of Accidents

*The most simple accident that occurs is a concrecence of a part without any external opacity.*

*The next is that in which vessels are ruptured by contusion; the cellular substance is effused with blood. This effusion is called by Segur an Ecchymosis. The best and most effectual method of removing this effusion, (when recent) is by the application of cold water. If after several days the effusion should continue, a puncture should be made with a lancet, and the effused blood let out. In some cases absorption takes place, and it is removed; but in others again, absorption will not take place, and the effused blood instead of coagulating remains fluid; in this last case it is that the lancet should be used. If the effused blood becomes coagulated a hard tumour is formed. The best means of removing it, is by the use of a compress and bandage.*

## II. Of Wounds.

*Wounds differ from contusions by having an external opacity. The first thing to be done in superficial wounds, is the promotion of union by the first intention. When this can be accomplished it is unattended with pain. When union by the first intention or what is called Resolution, does not take place, inflammation is excited of which I am in the next place to speak.*

### of Inflammation

*The simple act of Inflammation cannot be considered as a disease.*

A page from the notebook

In the discussion of abscesses, the students were regaled by this narrative:

"I know a lady who was troubled with a violent pain in the top of her head, which arose from a collection of pus in the calf of her leg. A variety of means were used for it, without effect. I then made a free incision into the abscess, and the pain immediately ceased. I have known all the symptoms of nervous fever in two persons, which arose from abscesses about the ring of the oblique muscles.

One of them died before the abscess was discovered, the other mentioned that he had an abscess. I made an incision into it, and he very soon recovered."

From this bit of clinical experience, one might judge that history taking and physical examination were not as thorough in 1815 as now. Patients apparently were expected to make themselves responsible for disclosing all the pertinent facts. But, then was a time of greater individual responsibility. Nowadays one thinks the doctor is required to carry more of it than is his due share.

With respect to mammary abscess, the lecturer states, "It rarely happens that we can ever see the formation of this abscess, owing to nurses supposing that they can cure it without any other assistance. . . . The pain attending it is sometimes so excruciating that I have often heard women say 'It exceeds the pains of parturition' . . . Gentlemen, there is no disease so completely under our power if called in at its commencement. . . . The remedies which I have used and which I think are the most proper, are bloodletting, mercurial purges, vegetable diet, warm oil applied to the part, and if the patient sits up, the breast should be supported by a handkerchief tied round the neck, and under the breast. Leeches should be applied to the part, and a bread and milk poultice with lead water. If after proper evacuations, inflammation continues, a blister over the inflamed part is generally found very useful in removing the inflammation. Suppuration will scarcely ever occur in this case, if it does, the abscess must be opened and a bread and milk poultice applied to the parts."

One sees in this quotation that obstetrics had not yet been successful in winning for itself all the territory now belonging to the field. We are also reminded by the reference to the pains of parturition that anesthesia had not yet been more than dreamed of.

The section on "Burns and Scalds" reads more like the modern version in text books of surgery. The air-exclusion principle was the one chiefly relied upon. "A plaster of Basilicon, softened with Spts. Turpentine is a most excellent remedy, if the cuticle is off. The plaster must be applied to the burnt parts only, for if it touches the sound skin, it causes violent inflammation."

The tendency to the formation of crippling contractures after severe burns is stressed, and proper splinting to prevent them is recommended. Of two illustrative cases, one is particularly interesting, in that it cites an experience of the great Hunter. "A boy accidentally got the whole lower part of the abdomen, scrotum and testicles scalded severely. It was dressed carelessly, and when healed, the penis firmly adhered to the scrotum. The boy, after he got to be fifteen or sixteen years of age, began to complain dreadfully, and applied to Dr. Hunter, hospital surgeon in London. The doctor found the operation a very difficult one. He, however, with

great care and attention, at length succeeded in procuring him about an inch."

Gangrene, under the title "Mortification," received rather scanty description, considering Hunter's investigation of the blood-vascular factors in producing it. The recommendation of bread and milk poulticing of gangrenous limbs to my mind provides the strongest contrast with modern therapy to be seen in the whole notebook.

*Scribbled taken at the Medical Lectures  
in University of Pennsylvania in the  
winter of 1875-1876. by Robert Cravens Abernethy.*

From the title page of Dr. Cravens' notebook

The very beginnings of thoracic surgery may be seen in one portion of the discussion of wounds. "Wounds made by shot or bullets into the cavity of the thorax are generally dangerous, as they must suppurate and slough out all the contused parts. It causes a great deal of inflammation inside of the chest, difficulty of breathing, etc. When this is the case, we must have recourse to copious bloodletting, copious purging, and a very low diet. Lint or any such application, when applied to wounds which penetrate into the cavity of the thorax, should be secured from falling into the thorax.

"Two officers playing at cards one day, a dispute arose between them, upon which one of them stabbed the other. The wound penetrated into the cavity of the thorax. In this case, the external wound was so large as to admit air, as I was sent for immediately after the accident. I just applied a piece of adhesive plaster over the wound, and let the air remain in it, and by bleeding, purging, etc., he was cured, and no bad effects arose from the confinement of air contained in the chest."

In connection with "Compression of the Brain," there is to be noted the dread of opening the dura, which prevailed before the days of Lister, and the readiness to employ the trephine, which prevailed for many a year—in fact, down to within a decade or two of this day of grace.

"Mr. Abernethy says that in compression of the brain from effusion, when there is no contusion, it may be known where to perforate by attending to the following circumstances: If an incision is made down to the bone, and the periosteum be scraped off, if no blood flows, it is the proper place, because the bone is dead there, but if hemorrhage succeeds, the bone is not dead, and of course, it is not the right place.

"In consequence of the great danger arising from puncturing the dura mater, I determined some time ago to try the effects of copious bleeding, purging, low diet, etc. The first case that presented to me, was in a boy whom I trepanned, and found

the effusion to be between the dura mater and pia mater. I immediately dressed the wound and did not puncture the dura mater, but bled him five times every day, until he fainted each time, for several days, purged him freely, applied cold water to the head to lessen the extravasation, and afterwards applied a blister over the head. These remedies proved successful, and the boy got well in a very short time. . . .

"Compression of the brain resembles very much intoxication in its symptoms. In order to impress it more fully upon your minds, and in order to caution you against making such mistakes, I will relate a case which took place some years ago in Edinburg. A hostler, who was frequently in the habit of getting drunk, being out with his companions one day, got very much intoxicated. Towards evening, he went home as usual, in order to take care of his horses, but being so very drunk, he fell down in the stall, underneath one of his horses feet, and in falling hurt his head so much as to make it bleed considerably. One of his

<i>List of Clothing No. 11/1875</i>	
1. Brown great Coat	Philadelphia
1. Lustered - - -	Ditto
1. Blue Dress	Ditto
1. P. Brown. Stockinette	Pai. 100ns
1. P. Blue	Ditto
1. P. Domestic black.	Ditto
2. Running Shirts	
2. Cambric	Ditto
1. Black silk West	
2. Morsails	Ditto
1. Striped	Ditto
2. p. white woolly Stockings	
2. P. Gray	Ditto
2. Silk Pocket Handkerchiefs	
2. White Cambrian Neck Handkerchiefs	
2. Striped - - -	Ditto
1. Black Silk.	Ditto

*List of clothing written in the back of the notebook*

companions, coming in the stable a short time afterwards, and seeing him lying under the horses' feet, went up to him and found him motionless and senseless, and perceived blood running from his head. As the man was unable to give any account of himself, it was supposed that the horse had kicked him, and fractured his skull. He was therefore immediately carried to the infirmary. The surgeon was sent for, and came immediately. Upon examining the patient, he supposed him to be laboring under compression of the brain. He

therefore ordered the head to be shaved, and proceeded to perform the operation of trepanning. Having made an incision through the integuments down to the bone, no fracture was observed. As it was growing late, and as no consultation had been made, the surgeon concluded to omit performing the operation until a consultation was had. The next morning he accordingly ordered the house physician to send out notices to the other surgeons of the house, requesting their attendance the next morning in consultation. The patient was left in the care of one of the nurses of the house, who sat up with him the whole night. The next morning, he awoke and finding himself in a strange place and upon putting his hand to his head, found that very sore, asked the nurse (who was sitting by him and watching him very attentively) what was the matter, and where he was. 'Hold your tongue,' said she. 'They are going to trepan you in a short time!' This alarmed the poor fellow, so that he got up, put his coat under his arm and slipped out of the room and made the best of his way home again, to the astonishment of his nurse, and the great detriment of the surgeon and his attendants. This might all have been prevented, if the surgeon had paid attention to the breath of the patient, which would have smelled of liquor, or the liquid which was vomited, in which the rum might have been seen or smelled."

There is not a page of this notebook which is not entertaining, and instructive reading. A particular value of this record is the apparent faithfulness with which student Cravens set down what was told him, including all the personal medical experiences of his instructors—such matter as modern students are wont to turn to their entertainment rather than to their instruction.

In the back of the notebook, several pages are devoted to the accounts which young Dr. Cravens kept in his early days of practice, which were, in fact, his late days as well, for he died in 1821 at the age of twenty-seven. Had he lived to achieve a ripe experience in his own right, it would seem probable that he would have made his mark in the annals of Indiana medical history, just as his faithful memoranda of his student days in the University of Pennsylvania School of Medicine now take their place among the valued records of the virile forefather days of American medicine.

## POSTGRADUATE COURSES INDIANAPOLIS

APRIL 6-11, 1936

See Pages 140 and xxiv

## THE RELATION OF THE INDIVIDUAL PHYSICIAN TO THE COUNTY AND STATE MEDICAL SOCIETIES\*

E. A. MEYERDING, M.D.†

ST. PAUL, MINNESOTA

When I talk about medical organization, I like to borrow a term from Dr. R. E. Scammon of Minnesota, who was formerly Dean of Medical Sciences at the University of Minnesota, and at the University of Chicago. Dr. Scammon looks at organized medicine as a "guild," and at the physician as a member of this guild. Throughout my talk I will try to keep this relationship before you.

I find the term "guild medicine" a very appealing and illuminating term. You will agree with me that the closer the members of our profession get together, the better will their mutual problems be solved.

### MEDICINE IS THE ONLY MODERN GUILD

Medical organization is the sole modern survival of the guild of the middle ages. It continues every one of the characteristics which marked that unique and romantic institution. It has established a code of conduct; it limits and disciplines and trains its members; it shares equally among its members all of the arts and techniques of the profession. It brooks no interference with the essential functions of the guild in its relationship to its members, nor of the physician in his relationship to his patient.

### MEDICAL GUILD SERVES NEED

When the guild of medicine was first established some 500 years ago, all human affairs were conducted in the form of guild organizations. That the guild of medicine, alone, should have survived the tremendous social upheavals of the Reformation, the Industrial Revolution, is not simply an historical accident. It has survived because it has served and it continues to serve a real social and humanitarian need.

The crisis which medicine faces today is admittedly serious, but it is hardly any more serious than the crisis of the Reformation. It seems very unlikely that an institution which outlived those times should then fall in the face of our present economic difficulties.

\* Presented before the Secretaries' Conference at Indianapolis, February 2, 1936.

† Secretary, Minnesota State Medical Society.



E. A. Meyerding, M.D.

#### PATIENT-PHYSICIAN RELATIONSHIP UNIQUE

The best reason for the guild lies in the fact that its physician members have an essentially personal relationship with their clients which admits of no other type of central control with the physician. This personal relationship scarcely exists anywhere else at all except in the relationships of the church. No new plan for the care of the sick can reason away this unique character of medical care. And so long as this is the case, reputable medical men must associate themselves for their advancement and protection in a manner which must not be essentially altered by business organization or methods of efficiency.

#### MEDICINE VS. BUSINESS

It is very important to keep before us always the essential difference between medicine and business. Consider this matter of medical discoveries for instance. A surgeon, member of the medical guild, who discovers a new method or technique in operation, does not conceal his discovery. He publishes it. He trains his colleagues in its use. If he fails to do so, he is ostracized within his guild. If a business man, on the other hand, makes a discovery that will improve trade, it becomes a legitimate trade secret. Patenting of trade processes is a perfectly legitimate procedure, and individuals may hold the right to their specific discoveries for long periods.

There has been some discussion of late on the propriety of patenting some medical processes for certain purposes and under specific conditions.

Personally, I believe that the ethics of the American Medical Association, which hold that, "It is unprofessional to receive remuneration from patients for surgical instruments or medicines . . ." (Chapter III, Article I, Section 5), are for us to follow, rather than innovations attempted by the DuPont Bio-Chemical Research Foundation. The cancer research laboratories established by the DuPont interests at the University of Pennsylvania in 1927 were recently transferred to the Franklin Institute because Mr. DuPont believed that financial reward should be held out to investigators as an incentive and that discoveries should be patented. The university could not accede to this opinion. And we find only commendation for the trustees of the University of Pennsylvania and for such individuals as our own Adolph M. Hanson, of Faribault, Minnesota, who did, indeed, patent his parathyroid extract, but turned the proceeds over in perpetuity for furtherance of research through the Smithsonian Institution.

#### MEDICAL SERVICES CANNOT BE PRICED IN ADVANCE

Another fundamental distinction between the functions of the physician and those of business lies in the fact that it is impossible to price medical services in advance. Each medical problem is a biological problem and does not permit the codification and pricing that is characteristic of modern

business procedure. There can be no precise estimate of the complexity or time required for treatment in any given illness. It is clear, then, that the protection and progress of both the physician himself and of the science of medicine require a social and economic structure that is essentially different from that required to protect the interest of business and of the business man.

#### ORGANIZED MEDICINE HAS PUBLIC OBLIGATION

That organized medicine fulfills the function of the guild for its own members need not be argued before this gathering. That this same guild must assume definite obligations to the public welfare also goes without saying. It must represent the individual medical man in his dealing with the public, and it must take a definite leadership in all matters that have to do in any way with helping the sick or keeping men well.

#### LEADERSHIP AMONG AFFILIATED WORKERS

I think it is important to go into this matter of leadership extensively. Actually, the professions that are engaged in the maintenance of our health are numerous. The number and complexity of this army of workers is so amazing that I have listed some of them. (Figure 1.) They include

OVER A MILLION PEOPLE OTHER THAN PHYSICIANS ARE ENGAGED IN GIVING MEDICAL AIDS IN THE UNITED STATES	
NURSES	LABORATORY WORKERS Bacteriologists Medical Technicians Laboratory Technicians
ANESTHETISTS	DENTISTS Dental Hygienists Dental Anaesthetists Dental X-ray Technicians Dental Laboratory Workers
DIETITIANS Hospital Dietitians Teaching Dietitians	MEDICAL SECRETARIES Executives Stenographers, etc.
OPTICAL WORKERS, ETC.	MEDICAL SOCIAL SERVICE WORKERS Investigators, Home Visitors, etc.
HOSPITAL EXECUTIVES Superintendents of Hospitals	X-RAY TECHNICIANS
Directress—School of Nursing Obstetrical Supervisor Stenographers, etc. Clerks	

Figure 1.

a very large number of people of various levels of skill and technical training. It is estimated that in the United States there are over a million persons, including doctors, dentists, technicians, nurses, medical secretaries, and hospital personnel, who minister to our health. There are perhaps 45,000,000 gainfully employed persons in the United States, and that means, roughly speaking, that there is one person occupied with attention to health for every 40 or 50 workers.

#### MEDICAL LEADERSHIP THREATENED

Is leadership of this vast army of workers to continue to be vested in the doctor? Or will a new independent leadership be created?

Fifty years ago this matter of leadership amongst those who were affiliated in the delivery of medical care was no problem at all, since the doctor had very few assistants in his work. Nowadays his assistants have become so numerous, and requirements for their training so extensive, that there are groups continually asserting their independence of medical leadership.

Social promoters are flirting with nurses, offering guidance and assistance, in the hope of taking over that leadership. The nurses (Figure 2), the

NURSES	
Types and Classifications	
General Duty Nurses	Contagious Duty Nurses
Private Duty Nurses	Surgical Nurses
Institutional Nurses	Dietitians
Children's Nurses	Psychiatric Nurses
Anesthetists	Operating Supervisors
Nursing Supervisors	X-ray Technicians
Night Supervisors	Dental Nurses
Floor Supervisors	Office Nurses
Instructors	Obstetrical Supervisor
Public Health Nurses	Directress—School of Nursing
Tuberculosis Nurses	Superintendent
Industrial Nurses	

Figure 2.

medical social service workers, the technicians, and the hospitals, all have their own organizations. Why should not these organizations be part of our great medical organization?

The situation is anomalous and undesirable from every point of view. It is a serious threat, furthermore, not only to the leadership of the Guild, but to the effectiveness of our medical care in the United States.

#### DOCTORS MUST BE IN CONTROL

The guild of medicine must control the situation and must direct its vast corps of assistants. This is the function which is peculiar to its existence in modern times.

In all probability, the guild should develop specialists of a new sort, skilled in this particular type of organization and control.

The standardization of specialists and hospitals, as undertaken by the American Medical Association, is a step forward, and should be developed to include additional groups.

Of course, the medical guild is simply a collection of individuals of a common profession, common ideals and traditions. It will not survive in the future as it has in the past unless leaders in the work of the guild arise and take a special responsibility for its continuance and welfare.

#### COUNTY SOCIETY MUST DEVELOP LEADERS

When our county medical societies fail to develop such people, our life as an organization will be doomed. I should like to pause here and cite for you a few men in whom you will recognize instantly

counterparts of persons in your own organizations, no matter how large or small. These are the men, to whom with others like them all over the United States, we owe the vigor and vitality of organized medicine in the United States today.

The first man to come to my mind as I stand here before this Indiana Conference is your own Dr. R. L. Sensenich. We look to Dr. Sensenich for guidance in some of the most difficult problems that confront organized medicine today. Dr. Sensenich is a conspicuous example of the ordinary practitioner of medicine who has taken upon himself, without any remunerations whatever, and at the sacrifice of his own interest, the responsibility for helping to shape the policies of our guild.

#### DR. SENSENICH'S CONTRIBUTION

Dr. Sensenich's study on behalf of the Committee on Legislative Activities of the American Medical Association of the public attitude toward sickness insurance, is one of the important contributions to our research and the relationships of medicine to society.

So long as there are men like Dr. Sensenich to point the way, we need have no fear as to the usefulness of the guild of medicine.

But Dr. Sensenich is by no means alone among your medical leaders in Indiana. There is Dr. Crockett who served with such distinction on the Committee which dealt with the American Legion and in the matter of care of the veterans.

I should like, also, to call to your attention two or three Minnesota men with whom I am, naturally, very familiar.

#### A MALPRACTICE HOBBY

There is, for instance, a certain busy practitioner in one of our northwest towns who has made a hobby of his study of the malpractice situation, not only in Minnesota, but in the United States. And, by the way, I sometimes wonder why more medical men who so often have interesting hobbies to occupy them outside their profession, cannot be persuaded to make hobbies of some of the urgent problems of medical economics.

#### HOBBIES OF MINNESOTA PHYSICIANS

Big Game	Anecdotes and Epigrams
Birds	Archery—bows and books, targets and arrows
Golf	Books
Guns	Charcoal Sketches
Other Sports	Clay Models
Tennis	Drawings—Pen and Ink Sketches
Architectural Drawings	Feeding Bottles
Boats	Indian Relics
Farming—stock, chickens, etc.	Miscellaneous—boots, pipes, clothes, etc.
Gardening	Music
Metal Working	Oil Paintings
Woodworking	Photographs
	Stamp Collections

Figure 3.

It is evident from the long list of hobbies (Figure 3) we found last year among our Minnesota men that they have plenty of time, ability, and money for such purposes. It remains only for us to stimulate the necessary interest.

To be sure, we know that all work and no play makes Jack a dull boy, but it seems to me that, as in the case of this busy practitioner whose hobby is malpractice studies, a special interest in some phase of medical economics will give real diversion, too.

SUGGESTED ECONOMIC HOBBIES	
Accounting for Doctors	Maternal and Child Welfare
Cancer and the Public	Medico-Legal
Clinics	Non-official Health Agencies
Collections	Official Health Agencies
Contract Practice	Organization of these affiliated groups
Crippled Children	Other allied groups
Editorials—as far as Economics are concerned	Press
Heart and the Public	Public Health Relations
Industrial Practice	Radio
Interprofessional Groups	Social Security Problems
Limitation of Number of Physicians	State Health Relations
Malpractice	Tuberculosis and the Public
	Veterans' Problems
Medical Students—Education of History of Medicine	
Medical Economics	
Social Relations, etc.	

Figure 4.

There is a long list (Figure 4) to choose from in this little-worked field.

Here are some of the startling malpractice figures this physician has unearthed of late which may be of interest to you: 51% of all the malpractice suits started in this country in the last five or ten years were started because of inadvertent remarks made by doctors.

The number of malpractice suits brought against doctors in the United States each year amounts to more than 4,000.

#### MINNESOTA PLAN

We have no system of financial aid for medical defense for our members in Minnesota. We abandoned that function as not proper or necessary for a State Association, some time ago. But this physician has developed a plan, approved by our House of Delegates last summer, which should really be of far greater benefit than any regular hired legal assistance.

The whole project will consume a great deal of the time of the Committee, and particularly its Chairman. His reward will not be in terms of money or increased prestige in his practice. He is working for the benefit of his fellows. Such tasks fall to the unselfish leader in a group.

#### LEADERS WITHOUT PERSONAL AMBITIONS

I am thinking, also, of another man who has served as councilor and president, and repeatedly a committee chairman and member, who gave, not days, but weeks of his time in the early days to solidify our organization. This man has no partner. He is not a member of any clinic that can take over his responsibilities, which, incidentally, are very great since he is a man of unique attainment scientifically. His worth in all of these activities has become so outstanding that he is now a national figure and even more of his time is taken by the Councils of the American Medical Association.

Of course, this kind of member does not tell the whole story of membership in our guild. As all of you know, there are amongst us a few individuals who are energetic and shrewd, but their energy and shrewdness is really centered upon furthering only personal ambitions and selfish objectives, and are consequently a menace to organized medicine.

#### CAPABLE BUT SELFISH

Instead of talking generalities, I will sketch for you in this case also, a man whom I have had occasion to observe closely for the past ten years in medical organization work. I am sure all of you have known his counterpart in other organizations.

Now this member, as a Committee Chairman and as an officer of the state association, has done much valuable work for the organization. He is an exceptionally capable man. He is also an exceptionally ambitious man, ambitious for the political prizes that may go with organization work. He is a mischief maker, drawing men into corners, bartering for votes, promising anything at all to this one and that one, in exchange for support.

He renders sterile and valueless all of his official work for the association, because the motive is not the good of all, but the good of one, and that one is himself.

Where he is, dissensions arise and divisions follow.

#### THE SCIENTIFIC SPIRIT FOR ORGANIZATION WORK

Doctors, to be sure, are much like other men, and certainly all of them are not perfect.

One could wish, however, that at least in these difficult times, they could apply a little more of the calm, scientific spirit applied in their practice to their contacts and conduct of county and state medical society work. If their divisions and discussions of organization work which hinge always, of course, upon personalities, were a little less personal, the good of the organization would be much better served.

In general, of course, our guild associations are productive of some of the most valuable and happy personal associations of our lives. Not only for

scientific advancement or for the joint solution of our social and economic problems, but for the sheer pleasure of knowing other medical men well, our organization should be a central part of our lives.

Medical men need to know each other better. This is the time when better acquaintance is needed. In a better understanding of each other lies the hope of our future. We do not believe the same thing is true of physicians as has been said about the Scotch: "The only thing two Scotchmen can agree upon is what the third one should give to charity."

#### FOR BETTER ACQUAINTANCE

Hastening this agreement by small social get-togethers has a special value. We have made it a point for years to get various groups, both large and small, together periodically. They meet informally for luncheon or dinner, talk things over, and arrive at a valuable understanding of our group problems. They also learn to appreciate each other's individual problems and points of view, and the result is a general understanding and united action that would otherwise be impossible.

So-called social levels within the profession fortunately do not seem to interfere with these social affairs.

Physicians are, by tradition and inheritance, individualists. No one should disturb this individualism so far as the practice of medicine itself goes. But economic and social problems cannot be met by the individual, though the individual physician, in his office contacts with the public, can certainly do something to meet the challenge of the times.

#### EDUCATION BY THE INDIVIDUAL PHYSICIAN

That, by the way, is something which I believe we do not sufficiently stress for our members.

The individual physician cannot singly settle such matters as the amount and extent of medical co-operation in the Social Security program, for example.

The physician can talk a minute or two to his own patients, as friend to friend, about the dangers of government encroachment upon the private practice of medicine; about dangers to the intimate relationship between doctor and patient, and of the necessity for medical supervision of public health projects.

He can also provide a very valuable course of education in medical economic and preventive medicine, in the value of a periodic examination, of the immunization measures, etc.

#### THE DOCTOR'S FAMILY

Now we know there is no better agent for spreading the truth in health matters than the doctor's own family. Every member should be instructed in the basic truths that underly our

problems, so that in private contacts, in discussions with neighbors and the fellow bridge club members, they can discuss intelligently these moot questions.

It would be a great mistake to leave all public education on these matters to the organization.

#### EDUCATION BY ORGANIZATION

On the other hand, of course, the individual cannot possibly carry on the essential newspaper, radio and lecture publicity that many state societies are now carrying on with such conspicuous success. Neither can the medical society, as a medical society, by itself, function with the best success in much of the most valuable of education work.

#### OFFICIAL NATIONAL ORGANIZATIONS

1. White House Conference.
2. U. S. Dept. of Agriculture.
3. U. S. Dept. of the Interior—Office of Education.
4. U. S. Dept. of the Interior—Office of Indian Affairs.
5. U. S. Dept. of Labor—Children's Bureau.
6. U. S. Public Health Service.

#### THE FOUNDATIONS

1. The Rockefeller Foundation.
2. The Milbank Memorial Fund.
3. The Commonwealth Fund.
4. The Duke Endowment.
5. The Couzens Fund.
6. The Rosenwald Fund.

#### NON-OFFICIAL NATIONAL ORGANIZATIONS

1. American Ass'n. for Labor Legislation.
2. American Ass'n. of Medical Milk Commissioners, Inc.
3. American Ass'n. of School Physicians.
4. American Chemical Society.
5. American Child Health Ass'n.
6. American Epidemiological Society.
7. American Heart Ass'n.
8. American Hospital Ass'n.
9. American Park Executives.
10. American Medical Ass'n.
11. American Public Health Ass'n.
12. American Red Cross.
13. American Society for Control of Cancer.
14. American Social Hygiene Society.
15. Conference of State and Provincial Health Authorities.
16. National Board of Medical Examiners.
17. National Committee of Mental Hygiene.
18. National Committee for Prevention of Blindness.
19. National Child Welfare Ass'n.
20. National Conference of Social Workers.
21. National Dairy Council.
22. National Health Council.
23. National Organization for Public Health Nursing.
24. National Safety Council.
25. National Tuberculosis Ass'n.

#### OTHER ORGANIZATIONS

1. State Health Department.
2. City Health Department.
3. County Health Department.
4. Insurance Companies.
5. Industrial Organizations.
6. School Health Service.

I should like to show you in Figure 5 a random list of official health agencies that are concerned with health, both national and state agencies. Obviously, physicians are vitally concerned with activities of all of these agencies and associations.

#### STATE-WIDE ORGANIZATIONS WITH HEALTH WORK INCLUDED IN THEIR PROGRAMS

##### Official Organizations

1. State Department of Health, Local Boards of Health.
2. State Board of Control (Welfare Boards), Child Welfare Boards.
  - a. Children's Bureau.
  - b. Research Bureau.
  - c. Division for the Blind.
  - d. Division of Tuberculosis.
3. State Department of Education, Local School Boards.
  - a. Division of Physical and Health Education.
  - b. Division of Rehabilitation.
4. State University.
  - a. Hospital.
  - b. Student Health Service.
  - c. College of Medicine.
  - d. School for Nursing.
  - e. 4-H Clubs.
5. Bureau of Indian Affairs.
6. Livestock and Sanitary Board.
7. State Dairy and Food Commission.
8. State Board of Medical Examiners.

##### Voluntary Organizations

1. State Medical Association, District and County Society.
2. State Women's Auxiliary, District and County Society.
3. State Dental Association, District and County Society.
4. State Woman's Auxiliary, District and County Society.
5. Minnesota Public Health Association, County Public Health Association.
  6. American Red Cross, County Chapters.
  7. Junior Red Cross, County Chapters.
  8. Federated Women's Clubs, District, County, Local Clubs.
  9. Minnesota Educational Association, District Divisions.
  10. State Parent Teachers Association, Local Clubs.
  11. American Legion and Auxiliary, District and Local Posts.
  12. Shrine.
  13. State Association of Public Health Nursing.
  14. Service Clubs, Local Clubs.

Figure 6.

It is for this reason that many of the state societies maintain contact with one or more of these (Figure 6) lay health agencies. On the Pacific coast we have the "Health Leagues." In Minnesota we have a close relation with the Minnesota Public Health Association.

#### THE PUBLIC GETS THE BENEFIT

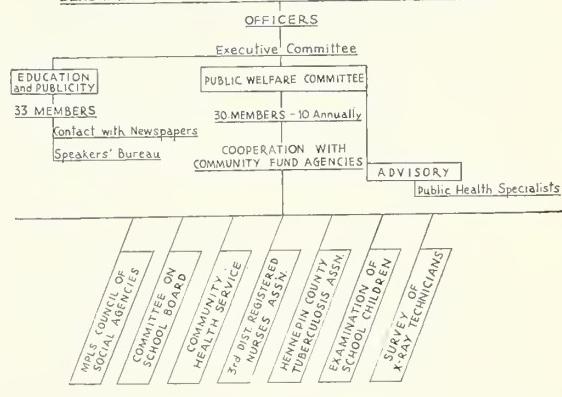
The public derives the greatest possible benefit from the health education program of the Minnesota Public Health Association because, by reason of it, there is almost 100 per cent cooperation of organized medicine in Minnesota, and we believe that organized medicine is benefited by the fact that the public is receiving this service.

No movement in the public health field has ever succeeded without the cooperation of the organized medical profession, even though it could command the services of a few individual practitioners.

Only inferior individual medical service is open to any group that tries to work independently of the guild.

If, on the other hand, the lay health group enlists the aid and cooperation of medical organization from the start, it gets the services, as a contribution, of the great medical leaders—men whose names have a tremendous following, and whose services are worth larger sums than any public health agency could afford to pay.

#### HENNEPIN COUNTY MEDICAL SOCIETY



In Hennepin County, Minnesota, the medical society has worked out an interesting and effective plan of cooperation with welfare agencies, which is worthy of mention.

The Hennepin County Medical Society has worked with both the lay group and participating physicians with perfect harmony for several years, by a plan whereby two members of the Public Welfare Committee of the county society sit on every lay welfare board that operates in any capacity in the county.

A sane health program, which is at the same time acceptable to all groups, is being carried out.

#### SOCIAL SECURITY PROGRAM

Every power and facility and every bit of prestige of our medical organization will be put to the test this year, I feel, with the local development in each state of the Social Security program.

A great deal of money—in amounts never available before—will be poured into each state for public health work.

Will this money be used where it is needed to extend necessary services? Or will it be wasted upon inappropriate and needless organization and full-time personnel, with little benefit to the public, and actual harm to the practice of medicine?

#### "IT'S UP TO THE DOCTORS"

In a very practical and definite sense, "It's up to the medical profession." This is the time for us to use our influence and our organization to guide the programs and policies of health departments and welfare agencies in the proper expenditure of these funds.

The Social Security Act is a fact—not a subject for academic discussion.

In Minnesota our Council as a whole constitutes the Advisory Committee to the State Health Department for the building of Minnesota's program.

The Council will work very closely with our State Health Officer, who has himself emphatically sought organized medicine's aid.

#### COUNTY COMMITTEES

Every individual county medical society has been urged to have an actively functioning contact committee all ready to guide in the local application of the program.

We have every reason to hope, if our cooperation is active and effective, that objectionable possibilities of this program will not ever become facts in Minnesota.

#### MEDICINE TAKES LEAD

Organized Medicine, with its famous Ten Points, has clearly enunciated its principles. These principles apply to the individual in his relation to the public as well as to the guild.

In accordance with these principles, the physicians themselves are taking the only practical steps toward the solution of today's problems. If affiliated medical groups everywhere follow in the lead of the American Medical Association, the theorists and irresponsible insurgents will have no weight with hard-pressed legislators.

#### OUR RESPONSIBILITIES

A proper expenditure of Social Security funds, a satisfactory solution of the problem of care of the sick poor and of low income groups, where special arrangements become necessary for the latter, legislative protection of the public from the ever-present menace of quacks and cultists: These are immediate responsibilities for the Medical Guild to shoulder and solve. They demand of us, not complaining and not harangues, but intelligent, vigorous action. I believe they will get it.

#### CONCLUSION

With a glorious history behind it and new, untried fields of usefulness before it, I believe that organized medicine in America will prove the stout rock around which the disrupted elements of our national life may rally. What I have tried to emphasize in this talk has been that we must be alert. Our medical guild must not pass into oblivion because we cannot adapt ourselves to changing conditions.

We are proud of our profession, proud of its leadership. We may sometimes question some of the policies that guide it, but I hope we shall all recall the stirring sentiment of Stephen Decatur and, paraphrasing it thus, we shall be able to say: "Our profession in her intercourse with those outside, may she always be in the right; but right or wrong, Our Profession."

11 West Summit Ave.

## ACUTE APPENDICITIS IN CHILDHOOD\*

STANLEY H. SKRENTNY, M.D.  
HAMMOND

Appendicitis is a prevalent disease, but nobody has known the exact frequency of its occurrence. It is not one of the diseases which are reported. It is estimated that at least one person out of every 245 has appendicitis each year. Approximately 10% of all operations performed are done on the appendix.

Appendicitis is not a new disease. Hippocrates, the founder of medicine, is supposed to have died of appendicitis in 370 B. C. When Hippocrates wrote, "Suppuration upon a protracted pain in the parts about the bowels is bad," he showed his appreciation of the seriousness of prolonged acute pains in the appendiceal region.

The death rate of appendicitis has not decreased since Murphy's day and still remains at about 10% in spite of better operative technic. Two-thirds of that mortality, however, occurs below the age of 12 years and over the age of 40 years, although not more than one-third of all cases of appendicitis occur within those age groups. It is universally granted that the disease in those periods of life differ in many respects from the disease as it is exhibited in the period of its greatest incidence, namely, between the ages of 15 and 40 years.

There are two important reasons for the high mortality rate in the two extremes of life. While we are willing to admit that occasionally the physician is called too late, this cannot be considered as a serious cause, because parents as a rule are much more solicitous about their children than they are about themselves. We have all seen cases in which a physician has been summoned for a child where in reality the parents were in much more urgent need of medical attention.

First is the very serious character of the pathological changes exhibited, the majority of the cases going to gangrene, rupture, abscess formation, or peritonitis very rapidly. That rupture occurs early in children there is no doubt, and perhaps it occurs, as it is generally stated, because the structures of the appendix in childhood are very delicate and because they are made up of a relatively large amount of lymphoid tissue. But the acceptance of that introduces further difficulties. It is universally admitted that tonsillitis is as frequent as it is in childhood, because of the large amount of lymphoid tissue in the tonsils at that time of life. But if the appendix also contains a very large amount of lymphoid tissue and if the fundamental pathology of tonsillitis and appendicitis is the same, why should the former be so prevalent and the latter disease relatively so

\* Presented before the Section on Surgery of the Indiana State Medical Association at the Gary session, October 9, 1935.

unusual? Is peritonitis so frequently present, and so frequently of the diffuse or spreading or general variety because of the short, transparent omentum of childhood and the weakened adhesive protection, or are there other causes? Finally, is the grave character of appendicitis in children, with its correspondingly high mortality, really due to a lower resistance in children or to something inherent in the disease? We are far from sure that it is wise to accept without reservation loose statements about the low resistance of childhood. Children frequently exhibit an amazing amount of resistance to infection or injury, and frequently recover from serious illness with a promptness and smoothness which seems to make that hypothesis untenable. We can offer no satisfactory replies to these questions but we are unwilling to accept unqualifiedly the explanations that are generally advanced and accepted without question.

Second, external factors contribute largely to the degree of pathological changes found in acute appendicitis in children, not the least important being the very frequent difficulty of diagnosis. It is much more difficult to diagnose acute appendicitis in childhood than in adult life. While the differential diagnosis of the disease is really simpler in children because there are fewer conditions to eliminate, the ultimate diagnosis is much more difficult on account of the failure to get an adequate history from the child. We are dealing here with a group of patients who cannot tell their stories coherently, if they can tell them at all, and who must have their symptoms and the course of their disease related for them by their parents and nurses who have entirely overlooked the onset of the illness or who may have misinterpreted what they have seen. In the diagnosis of any disease, the history is much more important than the physical examination.

Appendicitis in childhood is frequently attended with an atypical character and it is not a disease of sharply classical outlines. Many children with appendicitis obscure their symptoms by their conduct. The average child will play as long as it is possible for him to get about or until his pain becomes really disabling; the child may feel a little sick, have a little pain, vomit and then feel better and go out to play or to school for a day or so. A history of this sort is very misleading. Why should serious illness be suspected in a child that behaves in this fashion? Lord Moynihan and the late John B. Murphy, among others, have made categoric statements about the symptoms of appendicitis, and especially about their chronology, which have been repeatedly shown to be erroneous. The so-called appendicitis triad of abdominal pain, nausea, and tenderness is very frequently absent in cases of acute appendicitis in childhood. Many cases of acute appendicitis are ushered in with pneumonia-like symptoms of high fever, rapid breathing, fast pulse, etc., others with urinary symptoms, some with diarrhoea, others with con-

stipation, some with chills, some with vomiting and no pain, and still others are associated with a sore throat, some with marked dietary indiscretions and still others with trauma to the abdomen; in other words, in the examination of any child, one should always keep in mind the possibility of this treacherous and highly fatal disease, regardless of the symptoms present. That hundreds of children die yearly from appendicitis, mistakenly diagnosed by such broad terms as gastro-enteritis or intestinal flu, there is no doubt. The only possible way of reducing the mortality of acute appendicitis in childhood is early diagnosis and early operation. As Murphy wrote, long ago, a distrust of the inflamed appendix is still the only safe surgical frame of mind. It is better to perform an occasional unnecessary operation than to lose a life by delay.

Bastianelli goes further (and Bastianelli is a very conservative surgeon, he says): "When physicians are discussing whether the case is appendicitis or not, it is. When they are inclined to admit the possibility of appendicitis without being perfectly sure of it, it not only is, but is about to perforate. When the diagnosis is sure, there is already perforation with more or less circumscribed peritonitis."

5231 Hohman Avenue.

#### DISCUSSION

SATER NIXON, M.D. (Indianapolis) : Dr. Skrentny has given us a thorough and very interesting presentation on appendicitis in children. He has brought to our attention many pertinent facts under the headings of incidence, mortality, early diagnosis and prompt operative management, a full appreciation of which, by all of us, must obtain if we are materially to lower the death rate in these little patients. Practically all of these deaths could be prevented by application of our present ideas of immediate surgical intervention, providing the disease remains confined to the appendix. Therefore, of all the factors tending to reduce mortality mentioned by Dr. Skrentny, early diagnosis should receive greatest attention, the importance of the others notwithstanding.

The clinical features of appendicitis, especially in children, are variable and inconstant, and their exact etiology is somewhat speculative. Several recent writers on the subject have taken the viewpoint that the sympathetic and cerebro-spinal nervous systems are involved independently in the production of the signs and symptoms at different stages of the disease. Believing that much of the diagnostic confusion will be eradicated by accepting this hypothesis, I shall confine my remarks to an explanation of the clinical manifestations upon this basis.

The first effect of inflammation of the appendix is irritation of the sympathetic nerve fibers. This is usually manifested in children by irritability,

sleeplessness, anorexia, or a temporary abnormal increase in appetite, and possibly a departure from normal intestinal habits, i. e., constipation or diarrhoea. An accurate history will frequently elicit the fact that these symptoms were present for hours or even days, with intervals in which the child appeared perfectly well. These vague symptoms are followed by evidence of intermittent, colicky, upper abdominal pain, as indicated, among other things, by paroxysms of crying. These attacks of pain are at first moderate, but rapidly increase in severity, with definite wavelike remissions and progressively shortened intervals, and are associated with an aggravation of the nervous unrest.

Nausea and vomiting are almost invariably coincident with or immediately subsequent thereto. There is little or no elevation of temperature and the child does not appear to be very sick. The abdomen is usually "silent" and is neither distended nor retracted. There is an absence of involuntary muscular rigidity and tenderness. This soft and normal abdomen on palpation is a most frequent source of error in diagnosis, for it is not generally realized that during this phase there are no objective physical signs.

If the symptoms permanently disappear, as a result of the appendix having emptied its contents into the caecum, a probable diagnosis of a "gastro-intestinal upset" attributed to an indiscretion in diet is strengthened. However, Gertsley says that in 36% of the cases of appendicitis under twelve, there is a history and evidence of previous attacks, thus confirming Abt's observation that much of the gastro-intestinal disturbance of children represents definite appendiceal pathology.

Some cases of appendicitis may appear to be initiated by right iliac pain; however, except in the unusual cases where the appendical lumen has remained patent throughout, or where there is a disturbance of the neuro-muscular mechanism of the viscera, either congenital or acquired, there is no adequate stimulus for visceral pain; most of the children probably have had some, if not all, of the aforementioned visceral symptoms, but these were insufficient to merit attention.

It is the second phase of appendicitis which is initiated by localized, peripheral, continuous pain. This represents involvement of the cerebro-spinal system as a result of irritation of the parietal peritoneum by the underlying diseased viscera. The symptoms are then those of localized, formative peritonitis, and are in direct proportion to the degree of involvement. Muscular rigidity and tenderness, both superficial and deep, make their first appearance. Nausea and vomiting may recur for a short interval. It is now that the demeanor of the child changes from the previous one of jactitation to one of quietude, and the patient is content to remain in bed, usually with the knees flexed to relieve abdominal tension. There is an accelera-

tion of the pulse rate, usually out of proportion to the gradual rise in temperature.

This syndrome of symptoms is present in sixty per cent to seventy per cent of cases. However, the course of appendicitis in children is so rapid that it may progress from a simple endo-appendicitis one day to generalized peritonitis the next. Thus a policy of "watchful waiting" for the appearance of this sequence of symptoms may prove fatal. Furthermore, in retrocecal and retroiliac appendicitis there may never be localization of pain until peritonitis is well advanced, doubtless because the interposed structure or structures prevent early irritation of the parietal peritoneum. Also if the appendix lies in the pelvis, the child may give no indication of somatic symptoms until the disease has reached the fatal stage, since there is no muscle representation in the abdominal wall of the segments which form the pelvis.

For these reasons, our attention should be focused on an interpretation of the early visceral symptoms, an accurate appreciation of which will be conducive to early differential diagnosis.

In closing, I should like to ask Dr. Skrentny if he does not agree that the proportionately higher mortality from appendicitis in children is more an expression of failure of early diagnosis, the lessened degree of protection offered by the short and underdeveloped great omentum, and possibly an immaturely developed protective mechanism of the peritoneum, rather than any unusual difference in the reaction of the appendix itself to inflammation?

STANLEY H. SKRENTNY, M.D., Hammond (closing): I agree with Dr. Nixon when he says that many of these cases are mistakenly diagnosed. We are frequently called to a home where the child is sick with some vague disturbance. We get a vague history from the mother, we are in a hurry and often fail to do a rectal examination which, I think, is the most important part of the physical examination in these cases. We pat the mother on the shoulder and tell her the child will be all right. Maybe we are called back the next day and are chagrined at the findings because many of these cases by that time will have a ruptured appendix.

Interested in  
Postgraduate  
Work?

See Page 140

## REFRACTIVE METHODS \*

MYRON S. HARDING, M.D.  
INDIANAPOLIS

A successful cataract extraction, the diagnosis of an intra-cranial neoplasm, the cure of conjunctivitis, corneal ulcers, iritis and other ocular diseases are the ambition of the ophthalmologist. But we should not forget that refraction constitutes the greater portion of our work, and we should be sufficiently interested in this phase of ophthalmology to give it the time, effort, and careful attention that it deserves.

The ability to use the eyes with comfort for work and pleasure is almost as valuable to the patient as life itself. Relief from asthenopia cannot be obtained until after a careful, painstaking examination by an examiner, who pays attention to the minutest details. I often recall the words of a former professor who said that a refractionist needs the patience of Job and the precision of an old maid.

Asthenopia may be due to errors of refraction, muscle imbalance, or a combination of these two factors. The relationship between refractive errors and muscle imbalance is so close that no refraction is complete until the muscle balance has been measured both with and without the proposed correction.

The equipment of the refractionist need not be elaborate, but the apparatus should be simple, easily manipulated, and accurate. The refractive range should be at least twenty feet, the lighting facilities provide at least seven-foot candles, and the trial frame should be readily adjustable.

### HISTORY NECESSARY

As in all medical work, a careful history is necessary before refraction. Many are content with the name, age, and address of the patient, but these are only valuable in case it is necessary to send a bill. Many people are opposed to wearing glasses and will deliberately withhold information concerning asthenopia; these will require a little extra skill and patience to obtain the desired information. We need to know the patient's history with reference to acute illnesses, previous glasses, muscle disturbances, and ocular inflammations. The history should contain a statement of the patient's complaint in his own words, and information as to headaches, their location, time of onset, relation to use of the eyes, motoring, and movies. Particular attention should be paid to the patient's general health and the state of the nasal accessory sinuses. It is important that we know the character of the patient's occupation, the working dis-

tance, the lighting facilities, the hours of duty, and his ocular habits as to reading or studying.

The visual acuity of each eye is measured both with and without glasses and the near point of accommodation ascertained with a standardized card, either the Jaeger type or one based on the Snellen principle. In presbyopic patients, the reading range and the optimum point should be recorded, as these are very closely associated with the patient's occupation. The muscle balance is measured for both distance and near, using either the Maddox rod, Von Graefe's diplopia test or the Maddox wing test for near. The presence or absence of binocular vision can be quickly determined by Duane's test<sup>1</sup> using a red lens before one eye and having the patient observe a distant point of light.

The binocular loupes allows a careful inspection of the lids, conjunctiva and anterior segment of the eyes. The reactions of the pupils should be noted. Ophthalmoscopic examination of the media, the optic papilla, the retina and choroid will not only give an estimate of the refractive error, but will disclose any disease of these structures. Particular attention should be paid to cupping of the disc. In questionable cases, or where the history suggests glaucoma or intra-cranial complications, a visual field examination of the form and blind spot will assist the examiner in determining whether refraction is indicated and which cycloplegic may be used with safety.

There are varied opinions as to the use of cycloplegics and particularly which cycloplegic should be used in different cases. Children, because of their excessive accommodation, should be refracted under cycloplegia, preferably atropine. Homatropine in two to four per cent solutions is used in suitable cases from sixteen to fifty years of age, but not until the preliminary examination has eliminated glaucoma. The frequency of the administration of homatropine depends upon the age of the patient, his refractive error, and the interval allowed between the medication and the time of refraction. I believe most of our troubles with homatropine as a cycloplegic result from insufficient instillations and lack of time for full effects to develop. Most patients require about one hour for the instillations and one-half to one hour for the development of cycloplegia. Scopolamine requires four to six days for the cycloplegic effects to disappear and does not appeal to the writer, although it is used by many ophthalmologists because it causes rapid and complete cycloplegia.

Over fifty years of age, it is often advantageous to use three per cent euphthalmine in order to take advantage of retinoscopy and allow a more complete ophthalmoscopic examination. For out-of-town patients, retinoscopy and trial case examination can be made in the morning; and, after several drops of a one per cent pilocarpine solu-

\* Presented before the Section on Ophthalmology and Otolaryngology of the Indiana State Medical Association at the Gary session, October 9, 1935.

<sup>1</sup> Duane: Fuchs Textbook of Ophthalmology. 1924. P. 296.

tion, the patient will be ready for the post-cycloplegic examination in the afternoon.

In spite of the evident value of the cycloplegic examination, there are instances in which it is necessary to rely entirely upon the subjective examination. Here the examiner is largely dependent upon the statements of the patient, and the various questions should be readily understood by the patient. Instead of asking the patient if the glass makes the letters better or worse, be more specific and ask if the glass makes the letters distinct or blurred. Since the letters used in the Snellen cards are square, explain this to the patient so he can inform you if the glass under consideration causes distortion. As Dr. S. J. Beach<sup>2</sup> says, "Patience, not slowness; speed, not haste. Both slowness and haste cause fatigue and bewilderment."

With a little practice it will be found relatively easy to block out the refractive error with the retinoscope, having the patient fix on a distant object. Cylinder retinoscopy should be used in these cases so as to measure the correction in the two principal meridians with the accommodation in the same state of rest. The retinoscopic findings will indicate the combination of lenses to start the manifest refraction. If the uncorrected retinoscopic findings are used, a certain amount of fogging will result and give the advantages of the fogging method of refraction. Reduce the sphere until the best visual acuity is attained; then, by use of the cross cylinder, verify the strength and axis of the cylinder. Having the patient concentrate on a single letter, such as "L," makes it easier to determine if the various positions of the cross cylinder cause distortion or blurring of the letter. Explain to the patient that it will probably be much better without the cross cylinder, but that you want him to tell you when the positions are equally blurred and distorted. After the axis of the cylinder is correctly located, slight changes in the sphere or cylinder may be necessary.

Many patients are unable to distinguish the slight changes in visual acuity produced by very weak lenses, such as the +0.12 or -0.12 diopter spheres. Asking them to distinguish between the effects of the weak sphere and a plano lens will allow them to give a positive answer promptly.

The near point of accommodation should be measured for each eye, using a reading addition if necessary. Before writing the prescription, the muscle balance for distance and near should be tested. In esophoria prescribe the strongest hyperopic correction and in exophoria the weakest lens, but as a general rule, the glass which produces the best visual acuity should be used. If necessary, disturbances of the muscle balance may be overcome by a series of exercises, which should always be performed under the direct supervision of the ophthalmologist.

The proper astigmatic correction may or may not be determined by subjective examination. Cycloplegics, by allowing a complete relaxation of the ciliary muscles, permit the examiner to determine the cylinder needed to correct the astigmatic error. The value of cycloplegia is more evident when we consider that astigmatism accounts for most of the cases of refractive asthenopia. The cycloplegic examination is conducted along the same lines as the subjective examination; however, skiascopy will be more easily and accurately performed, and the latent hyperopia can be estimated and pseudo-myopia eliminated. Except in very young children, glasses should never be prescribed until after the trial case examination. The myopic correction, unless there is a high error, may be prescribed as found under cycloplegia. The hyperopic correction will require reduction of the sphere, depending upon the age of the patient, the muscle imbalance, and the amount of hyperopia.

Many ophthalmologists are opposed to the post-cycloplegic examination because of the additional time and effort required and the delay to the patient. The results are much more gratifying to the patient and most of them are willing to come for the second examination if the advantages are explained. By having patients better satisfied, the examiner will be well repaid for the additional time and effort. The post cycloplegic examination should commence with the lens combination found upon trial case examination and should be conducted along the lines of the manifest refraction. The near point of accommodation and the muscle balance are measured.

Aphakia introduces additional factors in refraction. There is an absence of accommodation, the eye has been inactive for several months, the healing of the wound and resulting scar formation produce astigmatic changes, objects do not appear as large as before, the prescribed glasses will be heavy and must be accurately placed in front of the eyes, and the patients are aged and tire easily. In many cases the retinoscope can be used to estimate the refractive error; in other instances the ophthalmometer will prove helpful since the astigmatism is due to variations in the curvature of the corneal meridians. Care must be taken to see that the trial lenses are placed in the same relative position to the eyes as the prescription lenses. The reading addition should not cause the patient to hold the book too close to the eyes.

Occasionally patients will suffer inconveniences after our best refractive efforts. Some of these may need a series of exercises designed to alleviate any muscle imbalance. Others may be working under improper lighting facilities. Improper light is a known cause of asthenopia and may counteract even the most accurate refraction. Recent advances in the science of lighting assist in relieving this class of patients.

We have discussed various refractive measures as applied in every-day practice. Cycloplegics

<sup>2</sup> Beach, S. J.: Refinements of Refraction. Graduate Lecture. Amer. Acad. Ophthal. and Otolaryngol.

should be used whenever feasible, as they allow a much more accurate estimation of the refractive error. The examiner should know and be able to use the various methods of refractive technic.

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### DISCUSSION

E. M. SHANKLIN, M.D. (Hammond) : Not since the Fort Wayne session has this important subject been discussed before this Section, and refraction is a subject of the utmost importance to oculists. I almost said that we cannot give too much time to it. It is important because there is a need for better refractive work. It is true that oculists have improved their refractive work to a very great extent during the present economic upheaval, because as an Indianapolis oculist expressed it, it has been the means of more bread and butter to many ophthalmologists.

Why it should be I do not know, but it is a fact that some oculists go to the trouble to use a cycloplegic, then do not make a thorough refraction. A case in point is that of a little youngster whom I found wearing a plus 0.50 sphere. The very intelligent mother said that the child had been atropinized for the examination but that little more than a manifest test was made. As a result of a retinoscopy, the child was given a plus 4.50 sphere, which resulted in an immediate and very marked improvement in her school work.

In another case, an adult of past forty-three, the prescription was, both eyes, minus 1.00, with a low minus cylinder, at ninety degrees. Plus 1.25 was added for reading. The patient complained, and was told that she had muscle errors and was given corrective exercises over a period of several months, but her discomfort continued. I did a retinoscopy, under euphtalmine, and found her prescription to be a plus 1.50 sphere, with a low degree irregular axis in either eye. I added a little plus for her bifocals. This cleared up the situation very nicely.

Just one other case: that of a child with a squint, O.S. She had been given a plus 1.50 sphere, with no improvement in her squint. Operation was advised, at once. Under complete atropinization, we found her prescription to be a plus 5.00, with a considerable cylinder. In two or three months, the squinting eye had assumed its proper alignment, with normal vision O.U.

I wish to register my objection to the practice of depending upon homatropine in the refractions of children. It seems that some oculists very frequently use this drug as a mydriatic in these cases. I have had occasion to recheck many of these cases and have long since come to the conclusion that we cannot use homatropine, in children, with any success. I use homatropine after about the age of sixteen, but not prior to that age. For a good many years, I have commonly used the Burroughs-Wellcome discs, grains 1/50, combined with an

equal amount of cocaine hydrochloride. I have often checked this practice and have found the discs equally efficacious with the solution and much more easily used. After forty to fifty, I invariably use euphtalmine. For many years, I used this in two to four per cent solution, using two instillations at an interval of five minutes. Lately I use the disc, grains 1/40, of the hydrochloride, waiting some thirty-five to forty minutes before doing the retinoscopy. As a matter of course, I use eserine ointment after the refraction is completed. Ordinarily, I use these euphtalmine discs in patients well over fifty, even up to seventy or more, these latter instances in cases which have been the rounds without receiving comfortable glasses. This enables one to make a careful study of the refractive problems, a study that cannot be made in a manifest refraction.

Several years ago, in one of our section meetings, I made the statement that the temperament of the patient had much to do with the success of the refraction. I have even more reason to believe this to be the case after further observation, and have found it advisable to catalogue grown persons as to their temperament.

However, a refraction does not end our problem in many cases. Unless the lenses are correctly placed before the eyes, we cannot expect good results. Too often we see patients with a pupillary distance of less than sixty wearing a pair of glasses with a pupillary distance of seventy or thereabouts, and the lenses are not decentered. Such patients, and their oculists, are sure to "come a cropper."

I have enjoyed this paper, and wish that we might have an hour or so devoted to refractive problems at each annual meeting.

E. O. ALVIS, M.D. (Indianapolis) : I want to compliment Dr. Harding. I think we should take his paper as stimulation to pay more attention to refractive work because if we would do that there would be fewer advertising opticians.

EUGENE L. BULSON, M.D. (Fort Wayne) : Dr. Harding has brought out a number of points, and one or two I would like to emphasize.

The first is that before doing a refraction, in our office, we always get the vision without any correction at all. Then a careful manifest is done, as Dr. Harding mentioned, and which I think is most important. I believe that a careful manifest, well worked up, is exceedingly important, and particularly so in elderly individuals.

I want to mention the importance of cycloplegics in every patient. It has been my custom to use them in all individuals, regardless of age. In patients over forty or forty-five years of age, I use a weak solution of homatropine, not so much for cycloplegia as for mydriasis. Even in patients who are suspected of having an increased intraocular tension, I have no hesitation in using it in order to do a more careful retinoscopy, and the value of the dilated pupil for ophthalmoscopy can not be

over-estimated. This is followed by a myotic, either a solution of pilocarpine or eserine, depending upon the amount of mydriatic used to open the pupil. I never have seen any ill effects following the procedure.

WILLIAM H. MILLER, M.D. (Terre Haute): Another important factor is that so many of us, when we get our work back from the optical house, never check the lenses. It has been the experience in our office that we have found many, many mistakes.

Dr. Shanklin mentioned the use of the plus 0.37 cylinder and Dr. Harding spoke of the plus 0.12 and minus 0.12 sphere. I wonder how many of your glasses that you get back from the optical house have a plus 0.37 cylinder in them? It is my understanding, and I get it from the man who has worked in an optical house for many years, that we do not get it. We either get a strong plus 0.25 cylinder or a weak plus 0.50 cylinder. While we get improvement, we do not get that correction in our lenses that we order.

B. D. RAVDIN, M.D. (Evansville): May I mention a drug that we use almost routinely in middle-aged and elderly people, when we desire to dilate their pupils for ophthalmoscopic examination? That drug is ephedrine hydrochloride, the same proportion that you use in your nasal work. The instillation of two or three drops at ten-minute intervals will produce in almost every instance satisfactory dilation of the pupils.

JOHN R. FRANK, M.D. (Valparaiso): Regarding the ordering of a plus 0.12 or a plus 0.37 cylinder, I have had the same experience, usually getting a plus 0.25 or a plus 0.50 when ordering a plus 0.12 or plus 0.37.

In making a two per cent homatropine solution for mydriasis, I put in five grains of the powder into one-half ounce of three per cent ephedrine solution. The ephedrine gives a quicker and wider dilation of the pupils but does not hasten the action of homatropine. The first drop I use is four per cent cocaine solution, then one to six drops of the ephedrine-homatropine solution, depending upon the age of the patient.

I have found that by putting on or lending the patient "commercial" round plus spheres, which are his full correction, and having him use them constantly until the new glasses are made, he will take or accept a cut of only one-half of one diopter, regardless of age. For instance, if the correction is plus 6.00, plus 1.00, axis 90 degree o.u., in a child, I give the patient a plus 6.00 sphere to wear for two weeks. On doing the "post" examination, he invariably will accept plus 5.50, plus 1.00, axis 90. If he has not worn glasses, he will not accept more than a plus 3.00 or plus 3.50, which, if prescribed, will cause eyestrain on reading.

I do not use the ophthalmometer much except in cases of aphakia. I find that I get the cylinder much more accurately with the retinoscope.

FLAVIA M. DOTY, M.D. (Gary): How many of you have had glaucoma occur after using homatropine in patients of forty or more years?

C. W. RUTHERFORD, M.D. (Indianapolis): I wish to compliment Dr. Harding on his paper. For the most part, I agree with him. I do not believe that he has gone far enough, but that is a matter of personal opinion.

Answering Dr. Doty's question—there is one case on record, at my last investigation.

Dr. Shanklin stated that the age forty was his limit for homatropine. I do not understand why anyone should not use cycloplegics up to age fifty-five, at least, and oftentimes as much as sixty years of age. Dr. Harding begins the use of homatropine at the age of sixteen, I believe, and he did not say much about scopolamine. Why would one want to use the drug in persons from sixteen to forty-five without considering the use of scopolamine? I certainly would not want to depend upon homatropine. However, each practitioner must be responsible for the medication he uses.

Take the tension of every patient of thirty years of age or over, and record the tension on the case histories. When it is above what I think is a safe point, I use a milder cycloplegic and repeat the examination until I am satisfied. Scopolamine to my personal knowledge can be used until forty years of age with perfect safety, excluding cases of potential glaucoma. After fifty-five or sixty, I find it seldom necessary to use anything except a mydriatic.

M. S. HARDING, M.D. (closing): In patients over fifty years of age, I use eupthalmine, retinoscopic, and trial case examinations in the morning. Then, after the instillation of several drops of one per cent pilocarpine solution, I am able to complete the post-cycloplegic test in the afternoon.

As to the use of discs, as mentioned by Dr. Shanklin, I have tried them and tried waiting one hour for the effects to develop, but I find that I get no more complete cycloplegia than I could get from homatropine solutions. In some cases I have had to use both homatropine discs and the homatropine solution. Scopolamine does not appeal to me because of the time required for the effect to wear off.

You Will Want to  
Be in Indianapolis  
April 6-11, 1936.  
Read Page 140

## PETROSITIS AND A CONSIDERATION OF GRADENIGO'S SYNDROME

### REPORT OF TWO CASES IN WHICH GRADENIGO'S SYNDROME OCCURRED\*

EUGENE L. BULSON, M.D.

FORT WAYNE

Because of the confusion which seems to exist in the minds of many otologists in regard to disease of the petrous pyramid and the significance of Gradenigo's syndrome, certain fundamentals and the pathologic changes responsible for trigeminal pain and abducens paralysis need to be understood in order to clarify some of the existing conceptions.

Although numerous instances of abducens paralysis had been reported in the literature, it was not until 1904 that the triad of symptoms, which has since borne his name, was described by Gradenigo. Six years later, Perkins described the peculiar anatomic relations of the sixth nerve in the outer wall of the cavernous sinus, and its relationship with the ophthalmic division of the fifth, the fourth, and the third cranial nerves. The syndrome, occurring in the course of an acute mastoiditis, consisting of a paralysis of the external rectus and pain in the temporal and parietal regions of the same side, was considered a clinical entity and indicative of petrous tip suppuration, but in the light of more recent observations it has been considered from a different standpoint. It is believed by some otologists that abducens paralysis is a toxic neuritis; it has been associated with leptomeningitis and epidural abscess; others have shown that the paralysis is of no diagnostic significance, as it has often been observed in intracranial complications of otitic origin which heal spontaneously. It has also been found that the true Gradenigo syndrome seldom occurs in suppuration of the petrosal tip, but pain in the regions supplied by the trigeminal is very common. Profant<sup>1</sup> explains this by the fact that the cells seldom extend to the extreme tip of the petrous pyramid and the distance to the trigeminal canal is ten millimeters shorter than to the abducens canal.

In order to understand better the pathology and symptomatology, certain important anatomical relations must be considered. It has been shown by Eagleton, Kopetsky and Almour, Profant, Vail and others, that petrositis practically always occurs in a well pneumatized bone, the pneumatization often extending to the zygoma, the squama, the floor of the middle ear, and around the mouth

of the eustachian tube. The avenues of infection, as given by Kopetsky<sup>2</sup> are:

(1) From the antrum or epitympanic space, above or below the superior semicircular canal, following the posterosuperior surface of the petrosal into the pyramidal tip.

(2) From the peritubal cells into the pyramidal tip.

(3) From the peritubal cells directly into the carotid canal or through dehiscences in the anterior tympanic wall into the carotid canal and then rupturing into the cavum Meckeli.

Wheeler,<sup>3</sup> Friesner and Druss<sup>4</sup> and others have shown the definite existence of a connection between the peritubal cells and the petrosal tip.

An osteomyelitis of the petrous tip may also develop by an extension from a sphenoiditis with necrosis of the body of the sphenoid bone, but as Carmack<sup>5</sup> has pointed out, this has occurred in only a small percentage of cases. In the majority of cases, infection spreads by one of the routes already mentioned, through the preformed pneumatic spaces.

#### THE SIXTH (ABDUCENS) NERVE

After piercing the dura over the sphenoid bone, the nerve turns forward and passes through Dorello's canal, which is the space between the apex of the petrous pyramid and the posterior clinoid process of the sphenoid. The canal, which is more or less triangular in shape, measures about eight millimeters wide and four millimeters deep, and is completed above by a strong fibrous band, the petrosphenoidal ligament. In addition to the abducens nerve, the canal contains the inferior petrosal sinus, both of which structures pass through the canal to enter the cavernous sinus. Dissections of this region have revealed differences in the length of the nerve in Dorello's canal, also variations in the size, shape, and position of the canal.

#### THE FIFTH (TRIGEMINAL) NERVE

The gasserian ganglion lies between the bone and the dura in a depression known as Meckel's cavity which is situated on the anterosuperior aspect of the tip of the petrous pyramid. The dura covering the nerve is very dense and firm so that the nerve is held snugly to the underlying bone. This is particularly true of the ophthalmic division which not only is bound down, but also has a longer course than either the superior maxillary or the inferior maxillary branches. In addition,

\* Presented before the Indiana Academy of Ophthalmology and Otolaryngology, Richmond, Indiana, December 12, 1934.

<sup>1</sup> Profant, H. J.: Gradenigo's Syndrome with a Consideration of "Petrosities." *Arch. Otolaryng.*, Mar., 1931, V. 131, 347-376.

<sup>2</sup> Kopetsky, Samuel J., and Almour, Ralph: The Suppuration of the Petrous-Pyramid: Pathology, Symptomatology and Surgical Treatment. *Annal. Otol. Rhin. and Laryng.*, V. 39, 1930, 996-1016.

<sup>3</sup> Wheeler, J. M.: Paralysis of the Sixth Cranial Nerve Associated with Otitis Media. *Trans. Sec. Ophthal. A. M. A.* 1918, p. 51.

<sup>4</sup> Friesner, I., and Druss, J. G.: Osteitis of the Petrous Pyramid of the Temporal Bone. *Arch. Otolaryng.*, V. 12, 1930, 342.

<sup>5</sup> Carmack, John W.: Infection in the Petrous Pyramid. *Jour. Ind. State Med. Assoc.*, V. 26, No. 12, Dec., 1933, 596-597.

the ophthalmic division is intimately adherent to the cavernous sinus. From these anatomical facts, it can be readily seen why disturbances at the petrous apex are more liable to affect the ophthalmic branch of the fifth nerve than either of the other two divisions. Also, as has already been pointed out, the ophthalmic division is more readily affected (because of its anatomical position) by inflammations in the petrous portion of the bone than the sixth or third or fourth nerves.

#### SYMPOTOMATOLOGY AND COURSE

From a study of many of the cases reported in the literature, and from the essayist's own experience, the symptoms and course of petrositis have many points in common which are almost pathognomonic. While petrositis may be present from the onset of the disease, or develop shortly after the onset, it develops usually at varying intervals after mastoidectomy. Ordinarily, the aural discharge ceases in ten days to two weeks following the mastoid operation. When the discharge persists, particularly after the post-auricular wound has healed, or when there is a recurrence of the aural discharge, it usually means a spread of the infection or the presence of some cells which have not been evacuated. Accordingly, if the aural discharge persists over a prolonged period of time, or if, after a period of time during which the ear was dry, a profuse discharge from the middle ear cavity reappears, one should strongly suspect a petrositis, particularly when accompanied by the other symptoms.

One of the first symptoms to appear is a dull aching pain in and around the region of the eye of the same side as the otitis. This pain may be coincident with the reappearance of the discharge or it may occur later. The pain is deep seated, is usually more severe at night, and is confined to the eye itself and the region over the eye; it is due, as has been pointed out, to an irritation of the ophthalmic branch of the fifth nerve. This type of pain is almost diagnostic as it occurs in practically all of the cases. This pain should not be confused with the dull, aching pain which is felt on the side of the head which is suggestive of sinus thrombosis or with occipital pain which is significant of meningitis. The pain occurring in petrositis is retrobulbar in origin and is confined to the eyeball itself and the region over the eye.

Taylor<sup>6</sup> divides the cases of petrous tip suppuration into two classes: those with and without adequate drainage.

The cases of petrous suppuration with inadequate drainage present the following history: Following a simple mastoidectomy upon an extensively pneumatized bone, an apparently normal convalescence ensues. This is followed by an interval of well being, varying from a few days to

several weeks. There is then usually a sudden, profuse otorrhea and retrobulbar pain radiating over the eye on the same side as the suppurative lesion, and a low grade sepsis is present. An x-ray will show signs of petrous suppuration, and operation is indicated. Eagleton<sup>7</sup> considers the low grade sepsis a diagnostic factor equal to the eye pain and says, "Pain in the first branch (of the fifth nerve), limited to the region behind the eye, is significant of irritation of the dura over the petrous apex and, in the presence of continued sepsis, signifies caries of the petrous apex." In the presence of the above symptoms, operative interference is indicated and delay in operating results in endocranial extension to the meninges which terminates fatally. In the cases of petrous suppuration with adequate drainage, the history is similar to the above with the exception that there is no pain around the eye and no sepsis. There is either a recurrence or a persistence of the profuse aural discharge which is the important clinical symptom. After drainage of the petrous apex, the condition either clears up entirely or results in a chronic otorrhea. It should be remembered that none of these symptoms in themselves are significant of petrous tip suppuration, but when they occur together as described, they are regarded as pathognomonic.

It is interesting to note that in none of the cases reported by Kopetsky was abducens paralysis present. On the other hand, many cases of paralysis of the sixth nerve, associated with a definite petrous tip involvement, appear in the literature. In this connection, Kopetsky<sup>8</sup> makes the following comments: "Because of the fact that abducens palsy is not a constant symptom, in the sense that the retro-orbital pain, low grade sepsis and persistent otorrhea are constant, it is not to be looked upon as a necessary factor in the establishment of a diagnosis of petrous tip purulence. . . . When we consider that most cases presenting the so-called Gradenigo syndrome go on to complete recovery, whereas cases of petrosal tip suppuration either terminate fatally or result in a chronic otorrhea if no attempt is made to eradicate the lesion surgically, it is inconceivable that the two conditions should be considered identical. Since we have seen that suppurations of the petrosal tip occur without an involvement of the abducens, it is illogical to look for the outward manifestation of external rectus palsy as a symptom diagnostic of petrosal tip suppuration."

#### TREATMENT

It is not within the scope of this paper to go

<sup>7</sup> Eagleton, W. P.: Localized Bulbar Cisterns (Pontile) Meningitis, Facial Pain and Sixth Nerve Paralysis and Their Relation to Caries of the Petrous Apex. *Arch. Surgery*, V. 20, 1930, 386.

<sup>8</sup> Kopetsky, Samuel J., and Almour, Ralph: The Suppuration of the Petrous Pyramid: Pathology, Symptomatology and Surgical Treatment. *Annals. Otol. Rhin. and Laryng.*; V. 40, 1931, 157-177.

into the treatment of petrositis. Kopetsky and Almour have devised a special technique for draining the petrous pyramid when indicated, and the otologist is referred to their excellent description.

It is obvious, however, from the statistics of undoubtedly cases of petrositis, that a majority of them recover following a simple mastoidectomy and that surgical drainage of the petrous tip is unnecessary in all cases. The rationale of treatment as given by Sunde<sup>9</sup> seems to be sound and conservative. He believes that the chief problem is to select patients who must receive operative drainage of the tip and those who will recover without it. Sunde advises watchful waiting for developments after making a diagnosis of infection of the petrous bone. He says that if the symptoms increase in severity or threatening signs ensue, such as increase in headache, irritability, vomiting, stiff neck, or vertigo, exploration of the petrous tip should be done at once, looking first for a fistulous tract, as he believes it better to drain through that than to make an artificial channel.

If, on the other hand, the stage of quiescence occurs, any increase or decrease in the otorrhea should be noted. If an increase occurs, indicating rupture in the middle ear, one should wait for further developments. If there is a decrease, or if no change takes place, exploration without delay is indicated.

The important point to bear in mind is the necessity of establishing adequate drainage of the lesion before endocranial complications have developed.

#### CONCLUSIONS

(1) Practically all cases of petrositis occur in a well pneumatized bone and the lesion is dependent on the anatomic structure of the bone rather than on the invading organism.

(2) Pain in the area supplied by the ophthalmic division of the fifth cranial nerve, a low grade sepsis and a persistent otorrhea on the same side, are the three constant symptoms which go to make up the clinical picture of petrositis.

(3) While an abducens paralysis may occur in the course of a petrositis, it is not in itself significant of petrous involvement and its occurrence is the exception rather than the rule.

#### CASE REPORTS

Case No. 1—D. A., a boy, age 6, was first seen on March 3, 1930, and gave the history that following a bad cold in the head for the past two or three days there has been some soreness around and back of the right ear and also some earache. Examination showed the right drum to be considerably inflamed and bulging and a paracentesis was promptly performed under a general anesthetic. This was followed by a purulent discharge.

On March 7 the temperature was 102° and the

child complained of pain over the mastoid. Following the application of ice over the mastoid, the temperature dropped, and the boy felt much better for the next three days. On March 14 there was a recurrence of the pain in the ear and a little tenderness over the mastoid. An X-ray of the mastoid at this time showed almost complete occlusion of the cell structure around the antrum and superior cellular area. The trabeculae showed some evidence of softening but the cell walls were still intact. The blood count showed leucocytes, 12,700; polynuclear leucocytes, 51%; large lymphocytes, 8%; small lymphocytes, 3%. Examination of the ear revealed no sagging of the canal wall and no increase in tenderness over the mastoid. The ear was still discharging profusely.

On March 18 there was a marked improvement in the boy's general condition. There was still no swelling in the external auditory canal but there was an increase in the tenderness over the mastoid and a slight increase in the white blood cell count. Mastoidectomy was urged and on March 20 a simple mastoid operation was performed on the right ear. At this time the blood count was 18,000 and there was an increase in the temperature and also pain and tenderness over the mastoid. The bone was found to be of the pneumatic type and the cells over the lateral sinus were broken down and this destruction extended into the tip of the mastoid.

On the fourth day following the operation the temperature was normal and on the seventh day the patient went home. The discharge continued from both the post auricular wound and the canal of the ear. On the fifteenth postoperative day, while out riding, the boy complained of double vision which lasted for five or six minutes. Examination showed no disturbance in the ocular movements in the various cardinal directions of gaze; the patient did, however, complain of some headache and some pain in and around the right eye. There was no elevation of temperature. The following day the mother telephoned, saying that the boy was seeing double and that the eyes were crossed when he looked to the right. Examination a little later in the day showed the right pupil to be a little larger than the left pupil, but there was no limitation of movement of the eyes and no double vision at this time. The following day, April 5, showed a partial paralysis of the right external rectus and a slight dilatation of the right pupil was present. Two days later there was complete paralysis of the external rectus with no movement of the right eye past the mid line. Pupils were equal in size and reacted normally to light and accommodation. There was a leukocytosis of 20,000 and the temperature was normal. There was still profuse aural discharge as well as discharge from the mastoid wound.

On April 8 another blood count was made which showed a leukocytosis of 28,000. An x-ray of the

<sup>9</sup> Sunde, Einar A.: Infection of the Petrous Bone: Rationale of Treatment and Report of a Case. *Arch. Otolaryng.*, April 1934, V. 19, 436-438.

mastoid showed a marked density of the entire petrous portion of the right temporal bone. The right mastoid was reopened and many necrotic cells were found going up toward the middle fossa and over the lateral sinus. Considerable purulent material and granulation tissue was curretted out. Numerous cells were exenterated in the tip of the mastoid and a portion of the posterosuperior osseous canal was removed. Three days later, April 11, there was a slight improvement in the external rectus paralysis.

The symptoms slowly abated although there was more or less pain in and about the right eye for the following two weeks. Both the aural and postauricular discharge continued until the latter part of June, at which time the paralysis cleared up. From this time on the patient made an uneventful recovery and was discharged the latter part of July.

**Comments:** The almost constant pain in and around the right eye, which was more severe at night, is indicative of petrous tip involvement. The involvement of the sixth nerve and the increase in the leukocytosis, of course, indicates either a further spread of the infection, or perhaps an inflammatory reaction of the dura in the region of Dorello's canal.

Case No. 2. P. D., a boy, five years old, was seen February 28, 1930, and presented the following history: Two weeks previously he began having a sore throat and the next night the left ear ached and the drum ruptured. The following night the right ear ached and the right drum also ruptured. Following this, the boy complained of diplopia and the left eye turned in for several days. The third day after the onset, the parents noticed a slight swelling of the left upper eyelid and the eye had a staring appearance. There was also some inflammation of the eyeball which lasted three or four days. There were no chills. The temperature went up each night to 102° or 103°; the boy seemed drowsy much of the time and had a thick yellowish discharge from the nose. He complained of an aching over the eyes and a burning sensation on top of the head.

Examination showed a slight swelling of the left upper eyelid. There was no inflammation of the eyeball and the pupils were equal and regular and reacted normally to light and accommodation. There was no deviation of either eye. A profuse discharge was exuding from both ears, more from the left ear. There was no sagging of the canal walls and no tenderness over either mastoid. Transillumination of the nasal accessory sinuses was negative.

The following day the boy seemed brighter but was still drowsy and had some photophobia. A blood count showed a leukocytosis of 30,000. X-rays of the mastoids were clear. X-rays of the sinuses showed a slight clouding of the right maxillary. The other sinuses were clear. Both ears were still

discharging profusely. On February 23 the patient's general condition was slightly improved; the blood count was 25,000, and the aural discharge was slightly diminished. The canals were perfectly clear and there was no pain or tenderness over either mastoid. The boy complained of pain in front of the left ear, in the left temple and in the left jaw. The white blood count dropped to 23,000.

The next three days brought considerable improvement for the patient; his general condition improved and the white blood count dropped to 16,000 on February 27.

On February 28 the temperature suddenly rose to 103.6° and the leukocytosis increased to 24,000. The patient was very drowsy and the left eye was very sensitive to light. Examination of the fundi and transillumination of the sinuses were both negative. There was still complete paralysis of the left external rectus. A simple mastoid operation was performed on the left ear on this day. The bone was found to be pneumatic in character and there was considerable fluid in the antrum, apparently under pressure. A spinal puncture revealed the spinal fluid to be cloudy. Culture of the spinal fluid showed the presence of a pneumococcic infection.

The following two days showed a little improvement, but on March 3 the patient complained of pain over the vertex and was very drowsy and had all the symptoms of meningitis. On March 4 the patient was given an intravenous injection of anti-pneumococcic serum, and on March 7 the patient died.

**Comments:** In both of these cases the bones were extensively pneumatized, the cells extending well up into the squama and zygoma.

While both of these patients showed the typical pain in and around the eye on the affected side, indicative of irritation of the ophthalmic branch of the fifth nerve, they both showed involvement of the sixth nerve which is the exception rather than the rule. In the second case, it is interesting to note, also, the involvement of the second and third branches of the fifth nerve as manifested by pain in the cheek, upper and lower jaws, and teeth.

406 West Berry Street.

Indiana State  
Medical Association  
Graduate Educational  
Course, April 8-9!

» «

Indiana University  
School of Medicine  
Postgraduate Course  
April 6-11!

**THE JOURNAL  
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MARCH, 1936

**EDITORIALS**

**RESEARCH AND THE ETIOLOGY  
OF CANCER**

The need of the integrative relationship of the embryologist, the comparative anatomist, the physiologist, the chemist, the physicist, and the clinician is seen in the intensive work being done in the fight against cancer.

It is agreed that no thoroughly successful treatment of cancer can be devised until the underlying cause is found. Successful treatment undoubtedly will be developed later, because of an ability to attack this underlying factor, unless such treatment removes or kills the cancer cells, as is attempted at present.

Cancer tissue is quite generally described as being composed of cells which have lost their adult, specialized character, and have reverted to the embryonic cell type, growing without rhyme or reason. Workers all over the scientific medical world are traveling all sorts of roads which they hope will lead to the correct solution of the cancer problems. Let us travel one of these roads.

In the early part of the nineteenth century the Estonian embryologist, Karl Ernst von Baer, demonstrated that a unicellular egg upon becoming fertilized developed into a mass of multiplying cells which, becoming specialized, formed the very complex adult organism with its variety of tissues and organs. This destroyed the old doctrine of the preformationists who believed that the individual merely developed in size from the microscopic germ body.

During the past ten years a German, Hans Spemann<sup>1</sup>, has been working with the development of eggs of the newt, trying to discover why, at a certain stage of development of the embryo, the cells are plastic and capable of fitting into any pattern of differentiated cells, and at a different stage these same cells were capable of developing into specific tissues or organs only. This he could discover because of his delicate technique of transplanting the cells of the growing embryo into the body of another growing embryo at different stages of development. Injury of certain areas of cells of the embryo during the plastic stage did not prevent the development of a complete embryo later, but after this plastic stage any injury resulted in a defect in the embryo. There was no apparent change in the structure of the cells, but a chemical change occurred which specifically controlled the future destiny of the cells. He found that this change in the cells started when the tucking-in process of the embryo began on the dorsal side. This region gave rise to the nervous system which, as might logically be expected, is the first organ to be formed. Directly back of this region, Spemann demonstrated an agency which he named the "organizer." This agency is necessary to the development of the embryo and apparently controls the specificity of the cells. This organizer is at the exact location where the sperm enters the egg at the time it is fertilized.

During the last two years the Englishmen, Dr. J. Needham and Mr. C. H. Waddington, have extracted the organizer substance from an embryo and have found it to be a sterol, very resistant to heat, cold, and chemical influence. When injected into a very young embryo, it will cause the development of the primitive nerve cord. Further, it has been found that this organizing substance is present in all parts of the older embryo and in all adult tissues. Apparently its usefulness exists only at a certain stage of embryo development.

It has been demonstrated that cancer can be artificially produced by experiments using sterol-like substances. The substances which control the estrus and menstrual cycle in mammals are closely allied sterol-like substances. Both of these groups of substances are "capable of evocating" the formation of the primitive nervous system in the vertebrate embryo.

Can the evidence learned from the lowly water lizard be applied to the problem of the cancer cell? Does the unbridled cancer cell have an imbalance of a specific organizing substance? Will some lucky chemist or clinician with a laboratory mind put two and two together and find an answer to the cancer problem such as was found to the problems of diabetes and pernicious anemia?

We may be sure that some day some worker will find the right road.

<sup>1</sup> Dr. Hans Spemann, age 66, of the University of Freiburg, received the 1935 Nobel prize in medicine, which amounted to 101,520 marks, or \$40,608.

## PNEUMONIA

While mortality statistics from a national standpoint show some improvement in regard to pneumonia, and while numerous investigators have shown very worth-while reductions of those rates in large series of cases, the problem still remains a very serious one—one which the state and local communities can well direct their efforts, through their component medical societies, toward betterment. As in all other infectious diseases, the true mortality rates of pneumonia cannot be known. However, enough is known to state that with the older methods of management, a mortality rate of forty to fifty per cent in some types, and an average of twenty to thirty per cent for all types justifies the dread in which this disease is held.

Does the fault lie in our ineffectual efforts to stem the tide of this disease? Have we taken full advantage of the means at our command to combat its effects? Are we neglecting many of the older measures of medical and nursing care in preference to some of the glib assertions of purveyors of biologicals? In other words, are we, as individual practitioners, fully equipped with a knowledge of the newer phases of the therapy of pneumonia, backed by some good common sense in the application of adequate nursing care, and are we passing this knowledge along to the public?

Prevention as well as cure depends upon co-operation, and we can only hope for these in publicizing reduction of mortality through campaigns of education. Such a campaign has been initiated in New York by the polling of interests of the Medical Society of the State of New York, the New York State Department of Health, the State Association of Public Health Laboratories, the Metropolitan Life Insurance Company, and the Commonwealth Fund. The purpose of this campaign will be to bring to the attention of the public the vital need of skilled nursing care, and to stress the early helpful measure of serum therapy in specific type cases. Is it too much to anticipate the inauguration of a similar campaign in our own state?

In 1931 a study of pneumonia was conducted in the State of Massachusetts through the co-operation of the Commonwealth Fund. The report of this study is found in an excellent handbook by F. T. Lord, entitled "Lobar Pneumonia and Serum Therapy," published by the Commonwealth Fund. Through the judicious use of Felton's serum, the fatality rate among persons with type I pneumonia was 10.1, while the rate for those treated without serum was 24.4. For patients with type II pneumonia treated with the serum, the fatality rate was 26, while those receiving no serum showed a rate of 40.3. That is a worthwhile saving, and it convincingly shows the value of specific serum therapy in pneumonia.

In the past the widespread use of the serum has

been hampered because methods of typing patients could not readily be carried out. The element of time involved, some eighteen to twenty-four hours, performing the mouse method of typing sputum, as described by Avery, Chickering, Cole and Dochez, meant serious delay in the institution of serum therapy, and while a combination of the original mouse method with the Krumwiede and Sabin methods has shortened this to one to five hours, it still lacks the essential feature of universal application in communities where laboratory facilities are insufficient. This difficulty has now been largely overcome through the proposal of Armstrong, in taking advantage of the observation of Neufeld in 1902, that in the presence of homologous serum the capsule of the pneumococcus becomes swollen. Diagnostic anti-pneumococci sera of the rabbit type are now available for monovalent types I to XXIX, as well as for various combinations of polyvalent sera.

The technic of the test is readily carried out, and consists of the addition of the serum, to which methylene blue is added, to a small fleck of sputum. A positive reaction is indicated by the definitely outlined swollen capsule of the organism. Since the therapeutic serum is available for types I, II, and VII, a mixture of these diagnostic sera may be employed first, and if a positive reaction results, the type may then be differentiated by using the monovalent types I, II, or VII separately. Bullowa, and Cooper and Walter have agreed that the test is accurate in 76 per cent of the cases. The adoption of this test as a routine procedure, therefore, should be of great assistance in the early typing of pneumonia cases, and consequently should lead to the more universal use of the concentrated anti-pneumococcic serum.

When we consider that in the hands of numerous investigators the death rate in type I pneumonia cases has been reduced approximately one-half, and that in type II cases approximately twenty to twenty-five per cent, and that in addition the dreaded bacteremic groups have proved especially amenable to specific therapy; and when we further consider that types I and II approximate fifty-five to sixty per cent of all pneumonia cases, there can be no logical reason why serum therapy in pneumonia should not be as mandatory as serum therapy in diphtheria. With further refinement in preparation, potent serums for the other recently identified types will undoubtedly become commercially available, and should lead to an increase in the popularity of this therapy through a reduction in mortality rates of seventy to eighty per cent.

Recently considerable discussion has been evoked by the investigations of Bailey and Shorb, and of Jamieson, Powell, Bailey and Hyde which have prompted the addition of heterophile antibody, produced in rabbits, to the usual anti-pneumococcus serum. Hopes have been raised that through the use of this combined serum the neces-

sity of early typing and specific type therapy might be relegated to a secondary consideration. Finland, Ruesgsegger and Felton in a critical analysis of this procedure have concluded that the claims for this method are purely theoretical, and based entirely upon rabbit experimentation. There is as yet no collective experience in any significant number of cases of pneumonia to justify its use in preference to specific type therapy.

Finally, any consideration of pneumonia management must include the elements of physiological supportive treatment which is universally available. Absolute rest in bed, proper ventilation, adequate elimination (through the use of enemas, or very mild laxatives, and fluid intake), a generous salty nutritious diet, and mental and physical quiet are essential elements. Control of symptoms such as cough, pleuritic pain, headache, restlessness and insomnia can frequently be controlled by suitable medication. The control of cyanosis has been aided greatly with the use of oxygen through a suitable inhaler or tent. The old funnel method is of little value. Other complications such as abdominal distention, delirium, pulmonary edema and cardiac failure will find their solution only through the judicious use of adequate and constant nursing care, and medicinal therapy.

Pneumonia is an aggressive disease and as such requires aggressive treatment. A national reduction of mortality can only be hoped for by combining the older measures of good nursing and medical care with the widespread use of the newer methods of specific serum therapy and oxygen.

"Surely every medicine is an innovation; and he that will not apply new remedies must expect new evils."—Bacon.

### WHEREIN WE DISAGREE

A resolution has been received from the Council of the California Medical Association, constituting what amounts to a personal attack on Dr. Morris Fishbein, editor of *The Journal of the American Medical Association*, charging that he has capitalized his position with the A. M. A., and asking that his activities be curbed. The document apparently has been prepared with the single purpose of hampering the work of Dr. Fishbein, and we are completely at a loss to understand why any state medical organization should want such a thing unless the proponents are misled and fail to understand just what Morris Fishbein has done and is doing for organized medicine. Never before has the organized medical profession had such pleasant and effective relationships with the press of the United States as are enjoyed at the present time, and this to no small extent is due to Dr. Fishbein's management of the situation. The annual sessions of the American Medical Association are reported in the lay press more promptly

and more accurately than is any other scientific gathering, and the numerous press associations look to Dr. Fishbein as the authority when information is disseminated concerning the proceedings of these meetings. The work that Morris Fishbein has done, both in and out of the editorial office, has done much to establish friendly, personal contacts between the rank and file and the headquarters office of the American Medical Association. At the midwinter meeting of our Council, one member reported that the presence of Morris Fishbein at the district meeting resulted in the largest attendance in the history of that society. We wonder what California's reaction was to the manner in which Dr. Fishbein disposed of his opponent in the now famous radio debate? What do California physicians think of Dr. Fishbein's activities in the series of radio programs, portraying the ills and injuries to which human flesh is heir, and each time convincing possibly multitudes of people that their own physician is the one who is qualified to give them proper medical attention?

We believe that any man who reaches the pinnacle of success, as Dr. Fishbein has done in his particular profession, will find critics who will disagree with and oppose him. In this instance, we want to accord Morris Fishbein the credit which he deserves; we insist that he carry on the magnificent work that he is doing as one of the result-getting ambassadors of the American Medical Association. Any one who has seen him taking notes at a meeting, handling press representatives, asking and answering questions, all at the same time, will be reminded of Longfellow's words in regard to Julius Cæsar:

"You are a writer and I am a fighter,  
but here is a fellow  
Who could both write and fight, and  
in both was equally skillful!"

"Somewhere have I read, but where I  
forget, he could dictate  
Seven letters at once, at the same  
time writing his memoirs."

The American Medical Association needs just the sort of constructive work that Morris Fishbein is doing, and steps should be taken to assure continuance of it without interference.

### THE SECRETARIES' CONFERENCE

Indiana Medicine scored another distinct hit when some 150 of its members attended the annual secretaries' conference, which was held in the Columbia Club, Indianapolis, February 2, 1936.

The program, while it was a bit long, engaged the attention of those present for a matter of seven hours, affording much food for mature

thought on the part of the "go-getters" of the Indiana State Medical Association—meaning, of course, that dynamic bunch of officers, the county medical society secretaries. A majority of the county societies were represented either by secretaries or presidents, and some were represented by both officers.

The preponderance of younger men holding the office of county society secretary, and also the many presidents who must be classified among the younger group, was striking. This is a very gratifying thing, for "youth must be served," you know, and to see the interest displayed by the younger element in our Association is a delight to the old-timers who long have guided the destinies of our organization.

Chairman Mitchell was at his best. He had a record attendance, and from the beginning it was assured that his party was to be a success; he beamed throughout the meeting, and at the conclusion was generously congratulated upon the success of the affair. The only criticisms heard about the meeting were that some of the speakers occupied too much time, and that they did not wholly speak on the subjects assigned to them. It is hoped that this error may be remedied in future meetings.

Complete minutes of the meeting will be published in the April issue of *THE JOURNAL*. Names of those who attended and the papers presented by Dr. F. S. Crockett, Dr. L. T. Rawles, and Dr. O. O. Alexander are published under "Societies and Institutions" in this issue.

President Sensenich gave some wholesome advice to the assembled secretaries. Mr. Ross Garrett of Washington, D. C., spoke of the "Washington Plan" (he doesn't like to have it called that, but we don't recall that he gave it any other title); while all of the details of his plan were omitted, a number of the attendants noticed the similarity of the plan to one that already is operating in Indiana. Dr. O. O. Alexander of Terre Haute, chairman of our Council, laid down the laws of the Medes and the Persians in the matter of medical ethics. Dr. F. S. Crockett of Lafayette detailed the experiences of his home society in handling medical cases among the indigent. Dr. L. T. Rawles of Fort Wayne spoke on "High School Debates." Dr. Frederic E. Elliott of Brooklyn, New York, discussed the "New Deal Exploitation of Medical Practice." (This paper will appear in a later edition of *THE JOURNAL*.) Dr. Elliott's message was very interesting and was well received by his audience. Likewise, the paper by Dr. Albert McCown, director of the Maternal and Child Health Division of the Children's Bureau in Washington was very worthwhile, and will be published later.

The younger group registered again when Dr. C. J. Clark of Indianapolis told of plans of the

Graduate Education Program Committee. Dr. Clark is the first representative of the too-young-for-World-War-service group to become a member of the Council of the Indiana State Medical Association. He told of the plans for the coming post-graduate program and convinced the assembled secretaries that it had become their duty to advise their members to take full advantage of the opportunities offered at this gathering. Dr. Verne Harvey, director of the Indiana Division of Public Health, told of the work of his division in relation to the Association. The editor of *THE JOURNAL* briefly related the work of those whose duty it is to see that one of the best of the state medical journals is laid upon the desks of our members on the first of each month.

Dr. E. A. Meyerding, secretary of the Minnesota State Medical Association, presented a masterful discussion of "The Relation of the Individual Physician to the County and State Medical Societies," and his paper is published on page 116 in this issue.

In a short business session, Dr. A. M. Mitchell of Terre Haute was re-elected as chairman for the county society secretaries, and was duly commended for his efforts in making this one of the outstanding meetings of the entire year.

Dr. Austin A. Hayden, secretary of the American Medical Association's Board of Trustees, was introduced after dinner; it seems that Dr. Hayden just can't forego the pleasures of attending any of our "big doings" and he was kind enough to so express himself in a short, typically Hayden-esque speech. However, he so forgot himself as to say that his purpose in coming down was to take care of the applause to be accorded Secretary Olin West, and for that blunder he was made to suffer later.

President-elect E. D. Clark spoke briefly on medical education and offered suggestions that merit the attention of those in charge of that problem. The principal after-dinner speech was made by Dr. Olin West, secretary of the American Medical Association, who was in an unusually happy frame of mind, and his intensive observations and study have led him to feel very greatly encouraged about the future of the practice of medicine, though he warned us that the road is far from clear. We have heard Dr. West voice his opinions on many occasions, but never before have we known him to enter so wholeheartedly into the spirit of an occasion, and to hold the undivided attention of all present as he did on this night. An enthusiast for organized medicine, Dr. West "sold" his story to everyone present, and his address was a fitting climax to one of the best meetings ever held by an authorized group of the Indiana State Medical Association.

## EDITORIAL NOTES

**100% SOCIETIES: DEARBORN-OHIO, NOBLE, HANCOCK,  
BENTON, JENNINGS, SWITZERLAND, AND  
WASHINGTON**

A physician was called into a country district in consultation on a heart case, and took with him a portable electro-cardiograph. In the course of his examination of the patient, he used the instrument. A little while later, a patient from the same neighborhood consulted a physician and, during his visit, remarked that a doctor had been down their way and had used an electrical machine that told "what was the matter with your insides" and that the machine had "written it down on a piece of paper!" This is one example of how some of the "wild tales" get started.

An honored guest at the secretaries' conference was Dr. William T. Lawson of Danville, secretary of the Hendricks County Medical Society. Save for three years, when he served as president, Dr. Lawson has been secretary of this society since 1880, a matter of *fifty-six years!* Born in 1849, graduating from Miami Medical College in 1878, Dr. Lawson located in Danville, and at once became an advocate of county medical society organization. What a history of medicine in Hendricks county he could relate!

The next year would be a good time to check again and see if the patronage of our free clinics and free out-patient departments are having any unwarranted lengths of the yard stick covering those factors which make for eligibility to receive free medical care. Constantly we must be awake to give adequate medical care for persons of moderate means, but it is still easy for the wide awake "lady bountiful" to get doctors to give unwarranted services, and she gets the credit to bolster her ego.

Austin A. Hayden, efficient secretary of the Board of Trustees of the American Medical Association, is an inveterate note-taker when attending a medical meeting. Other than the official reporter, we daresay no person exceeds Dr. Hayden in this respect. We have observed him in this favorite occupation many times, and often have wondered if he plans to write a book on "How Medical Meetings Should Be Conducted." We have never learned what he did with the notes that he took at one meeting, that of the Tenth District Medical Society, when he took copious notes on an address by an "Italian count"!

An item that may be of particular interest to some of our folks is found on page 160 in this issue. It is an article entitled "Hospitals and Physicians Eligible for Loans Under Federal Housing Administration" and is reprinted from the *Journal of the A. M. A.* for December 21, 1935. Those who may wish to remodel and re-equip their offices, located in business buildings, are eligible in the plan, the credit extending from a few hundred to several thousand dollars. For those who maintain their offices in their homes, loans are limited to not more than two thousand dollars. Since the terms of the loans are very reasonable, it is possible that some of our members may wish to take advantage of the plan.

**THE ANNUAL POSTGRADUATE COURSE OF THE INDIANA STATE MEDICAL ASSOCIATION WILL BE HELD AT THE CLAYPOOL HOTEL, AND THE INDIANA UNIVERSITY SCHOOL OF MEDICINE, IN INDIANAPOLIS, APRIL 8 AND 9, 1936. THIS WILL BE DURING AND IN CONJUNCTION WITH THE ANNUAL POSTGRADUATE COURSE OF THE INDIANA UNIVERSITY SCHOOL OF MEDICINE, WHICH WILL BE HELD APRIL 6 TO 11, INCLUSIVE.**

**ALL PHYSICIANS IN GOOD STANDING WILL BE WELCOMED.  
SEE ANNOUNCEMENT ON PAGE 140 IN THIS ISSUE.**

OFTEN we see the title or term "social worker" used to cover a group of "short trained" as well as "long trained" workers without making necessary distinctions. Although the majority of community social workers have limited understanding of medical problems, there is the group of medical social workers whose first training at all times has been to see the physicians' problems in making the medical-social diagnosis. Editorials directed toward and against social workers should recognize this distinction. Better yet would be the more extensive training of all social workers along medical lines. This does not mean that nurses' training suffices. Too often public health nursing is a matter of piling up numbers of cases seen per month. To many of us, these monthly reports are direct admissions of work not well done.

"Widening Horizons in Public Health Service" was the subject of a paper given by C. H. Lavinder, M. D., Medical Director of the United States Public Health Service, at the meeting of the Social Service Section of the American Hospital Association at St. Louis, October 3, 1935. Under the Social Security Act, total appropriations of some ten million dollars yearly are available. The speaker put particular emphasis on the error of attempting to

separate curative from preventive medicine. To the private clinician this is most important, and co-operative plans can be anticipated for mutual benefit, for with the reduction of the morbidity and mortality from communicable diseases, there certainly will be increasing numbers of cancer, cardiac disorders, and the degenerative diseases of advancing life. None of these appropriations referred to are for medical relief. Their chief aims are to stimulate health programs in which the practice of medicine can share.

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Occasionally we like to browse around in the literature of some of the other professions, seeking items of interest and information. Recently there came to hand the October, 1935, issue of *Current Legal Thought*, one of the newer publications intended for members of the legal profession. This number is entirely devoted to medical jurisprudence and affords an amazing lot of information that many physicians could read with profit. It covers two major divisions: (1) the law concerning doctors and the practice of medicine, and (2) the fundamental legal concepts applied to the medical sciences in their utilization by law. The matter of licensure is carefully reviewed and the discussion of the legal rights of the licensed physician is duly presented. Malpractice, civil and criminal abortion, as well as the subject of medical testimony, are carefully and interestingly discussed. We commend this issue of *Current Legal Thought* to those of our readers who are interested in such subjects.

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The sickest of all patients is the mental patient. Just as soon as he gets a little noisy in a general hospital, his physician is asked to remove him. In that the doctor writes the discharge, the hospital's responsibility to the patient ends, and the doctor's responsibility increases. It is not unusual and not infrequent to see a patient now and then die, soon after such malhandling. Frequently the acuteness and severity of a mental case thwarts the possibilities of getting him into a state hospital because of the distance as well as crowded conditions and the waiting list on hand. A great deal is said about state medicine and the state entering into competition. The failure of hospital boards to see the need of a rather large number of rooms for the acute psychopaths and the indifference of the medical profession toward this hospital failure can mean only one thing. Sooner or later it will be necessary for the state hospitals for the insane to branch out into their districts and supervise extramural care of certain patients. This is an old but effective wedge for socialized medicine. And we have said nothing about the

short-term mental case whose incarceration in a state hospital engenders an eternal social handicap.

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An editorial in the January number of the *West Virginia Medical Journal* brings the suggestion that occasionally we lean back too far in the matter of medical ethics. Comment was prompted in discussing the referring of patients. It seems that the writer was asked by a layman as to whom he might consult regarding some plastic surgery, and the inquirer observed that he had been informed that this field was well occupied with the quack variety of doctors. The writer corresponded with the secretary of a medical society in a large eastern city and was told that such information was not in accord with the code. Consulting another large eastern city, he was successful in getting the desired information. We have had similar experiences, and we have been asked "what to do" in various situations; we have long since ceased to deny the questioner information on what seems the prudent thing to do, yet we continue to pride ourselves on being entirely ethical. We join with editor Bloss in his comment to the effect that "when John Public comes to us for reasonable advice, he gets it."

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A little observation while attending the recent secretaries' conference revealed the fact that an ever-increasing number of younger men are being named to offices in our county medical societies, and the observation was a pleasant one. In time past, almost every official was selected from the older group, and the young man who aspired to office was frowned upon in no uncertain manner. These young bucks, getting their primary baptism, will soon become the leaders in Association work, and it is up to us of the old guard to lend them every confidence and every assistance within our power. Well do we recall, many, many years ago, when we assumed our first really official position among those who were then regarded as the "amen corner bunch." It was with no little trepidation that we accepted office and, when some of the older crowd proffered their good wishes and their most timely assistance, we were transported to Utopian heights. We especially recall the time when we were sponsored by the late Doctor Bulson for a section office. We had assured our sponsor that he had made a very unhappy selection, but to no avail. We were named to the post, and had the pleasure of having the aid and support of Doctor Bulson for a tenancy of some twelve years. We have come to be extremely partial to the younger group, and will indeed be glad to do all in our power to further their work.

Hoosier physicians are being denied the privilege of materially shortening the course of typhoid fever and influenza, because THE JOURNAL has declined a full page advertisement from a Texas physician. The total cost to each interested physician would have been but \$4.50! Thus did headquarters thwart "our folks" who will be interested in some of the details. This interesting letter came from one who states that he is a physician and has spent the past seventeen years in the oil fields of Texas, thus having no opportunity to display his prowess before county medical societies. (Page Holman Taylor!) We quote from the letter: 'How, ever, I did submit portions of these formulas through prominent medical journals and mailed out hundreds of circular letters to physicians and hospitals.' Further along in his letter he states that, "Last winter, at their request, I sent large supply of my Influenza remedy to Chicago research men for clinical tests in that city. After many tests, over a period three months, these Chicago men made application to secure control of the formula, so that they might manufacture and distribute it, but I did not sign their contract." Then followed the interesting statement that the page advertisement was to be carried on a commission basis, and that THE JOURNAL would receive ten per cent of the receipts from the advertisement, and he attempts persuasion by pointing out that President Roosevelt has had much free advertising for his Warm Springs project, while the prevalence of the diseases curable by this miracle-worker are thousands of times more common than infantile paralysis. Thus do we dispose of an unparalleled opportunity: the letter remains unanswered!

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Dr. Stuart Broadwell, Illinois Medical Journal, December, 1935, discusses "Tonsillectomy in Pulmonary Tuberculosis." His experience in a series of 118 such cases would seem to refute the old notion that such operations are taboo during an active pulmonary tuberculosis. His patients were carefully selected, so that none with sepsis or in a hopeless condition were operated upon. Some of them were of the active type, with an afternoon temperature of 101. Patients who had had pneumothorax or phrenic operations two months prior or six months after the tonsillectomy were excluded from the report. His findings are:

Seventy per cent of all cases operated upon showed an improvement in general condition, gain in weight, one, two and three months after operation. Six positive sputums became negative and remained so.

One case with a negative sputum, temperature 99 at the time of operation, had a bad reaction, but this was compensated for at a later date by a gradual improvement and gain in weight.

In twenty per cent, the active tuberculosis condition was unchanged.

Nine per cent left the hospital two months after operation. Their condition was unchanged at this time and no further record could be obtained.

There is just as definite an indication for the removal of infected tonsils, both active and quiescent, as there is for the removal of focal infection elsewhere. The benefits derived by a tuberculosis patient are the same as those derived by non-tuberculosis patients. Active pulmonary tuberculosis is not to be considered a contra-indication for tonsillectomy when the operation is indicated.

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The medical press seems to be quite interested in the subject of automotive accidents, a matter we have stressed for some time past. Among the most illuminating articles recently noted is an editorial by Dr. James Northington, *Southern Medicine and Surgery* for December, entitled "The Way to Reduce by Two-thirds the Slaying on the Highways." He declares that less than one per cent of these casualties (he refuses to call them accidents) are due to defective lights on cars, and that seventy-five per cent are due to speed. Among the recommendations made are that side strips should be provided along all roads for pedestrians and that governors should be required on all automobiles, to regulate speed under fifty miles per hour. No cars should be operated without governors except those used by law enforcement officers. This recommendation, if enacted into a law, would of course affect cars licensed in his state; cars from other states could be driven in accord with local speed laws. A thing that interests us greatly is that he recommends that ambulances be required to comply with the law, regarding the installation of governors. We also are in accord with Editor Nottington in his declaration that he finds it advisable to travel via train rather than to risk his life along the much-traveled highways. Some may think that we harp too much on this subject, but it is one of the most important problems before the American public today. Practically all automobile traffic in the eastern section of the country, Chicago bound, passes through our region, hence we see a continuous procession of cars daily. We note the many, many accidents in the locality. At this writing, Cook County, Illinois, the Chicago area, has the damnable record of *one thousand* deaths from this cause in 1935. As Senator Borah said when commenting on the recent death of Senator Schall of Minnesota, "Cannot something be done to stop this slaughter on our streets and highways?"

**FIFTH ANNUAL POSTGRADUATE  
MEETING OF THE  
INDIANA STATE MEDICAL  
ASSOCIATION**

Will Be Presented

at the

**CLAYPOOL HOTEL**

and the

**INDIANA UNIVERSITY SCHOOL OF MEDICINE**

Indianapolis

**APRIL 8 and 9, 1936**

Forenoons will be devoted to clinics at the Indiana University School of Medicine. Afternoons and evenings will be devoted to prominent speakers from out of the state.

Both days will be devoted to discussions of Cardiovascular, Renal, and Neoplastic Diseases.

This meeting will be held during the annual postgraduate course of the Indiana University School of Medicine, which will be conducted April 6 to 11, 1936.

Complete details and program will be published in the April issue of THE JOURNAL

**REMEMBER — APRIL 8 and 9, 1936  
MARK YOUR CALENDAR NOW!**

**INDIANA  
UNIVERSITY SCHOOL OF MEDICINE  
ANNUAL  
INTENSIVE POSTGRADUATE COURSE**

Will Be Presented

at the

**INDIANA UNIVERSITY SCHOOL OF MEDICINE  
In Indianapolis**

**APRIL 6- 11, 1936**

**Speakers of National Prominence Will Be  
Included in the Program**

Forenoons will be devoted to clinics; afternoons will be devoted to didactic work, with special emphasis placed upon clinical demonstrations and discussions.

April 8 and 9 will be devoted to discussions of **Cardiovascular, Renal, and Neoplastic Diseases**, and the programs will be in complete charge of the Indiana State Medical Association.

**There Will Be No Registration Fee**

All graduate physicians in good standing are invited to attend.

**Complete Program Will Appear in the Next Issue  
of THE JOURNAL**

**INDIANAPOLIS—APRIL 6-11, 1936!**

## PRESIDENT'S PAGE

### DATED MEDICAL KNOWLEDGE

Medical knowledge is dated. Basic facts, proved valid through a thousand years or more, furnish the foundation of medical science. Upon this has been built in personal sacrifice and ceaseless striving of inspired investigators that sum total of knowledge which constitutes modern medicine. No history of human endeavor is richer in account of unselfish effort. None is more magnificent in its accomplishments. None has progressed with more breath-taking momentum. Profiting from each advance in chemistry, physics, bacteriology, botany, physiology, psychology, and all scientific research, it has applied to its own field whatever has been useful. Not only has life been made possible to millions of the earth's inhabitants through control of decimating pandemics, but progress in civilization has been made possible. Life has been lengthened and made fuller as a result of advances in the knowledge of hygiene, disease prevention, and treatment, and of equal importance by investigation of mental processes and emancipation from stifling superstition. What a heritage to the physician of the present!

Science does not pause, and the student fresh from school, giving attention to securing his financial establishment to the neglect of his scientific thought, soon finds that his medical information is dated yesterday. If an honest self-examination reveals a need of some new study, he should have sufficient energy and courage to take such steps as will bring his inventory up to date. While a license to practice entitles the holder to continue legally in this activity so long as he is not adjudged mentally or morally incompetent, the moral and legal responsibility to maintain fitness exists. There are some who would institute periodic examinations and licensure to determine if qualification to practice continues satisfactory.

The older practitioner, rich in experience, who keeps his medical knowledge abreast of the times, cannot be displaced until the infirmities of age disable him, for he grows more capable from day to day. But with his medical knowledge in general, bearing the date of his time-stained diploma, he is easily disqualified. As he isolates himself from his medical organization and contact with the newer work and the enthusiasm of younger men, he early forfeits the high position to which up-to-date information in a setting of accumulated experience would entitle him. The younger physician who does not enter into these organization contacts and up-to-date activities retards the progress and security which can be attained only through group interest, and misses that which the older man can contribute from the fullness of years of observation.

The medical refresher for the physician of some years of practice is not supplied by the undergraduate type of instruction. Special courses, adjusted to his needs and building upon his experience which the undergraduate does not have, are needed. Medical society meetings with broad programs and scientific exhibits are extremely valuable, offering the opportunity to hear a very large number of subjects presented by able men. The meetings for graduate instruction in various states have undergone much experimentation to determine maximum helpfulness to the membership. Programs including many subjects have been generally arranged, hoping by diversification to make the program attractive to as large a number as possible. Meetings have been taken to different portions of the state, in order to make them readily accessible to certain groups. This often precludes attendance from other sections. To cover the state in this manner would mean that some years would elapse between return visits to any one section. This is apparently a rather ineffective method of distributing the advantages of these programs. This year the plan was changed by the House of Delegates, and Indianapolis, central and readily accessible, was selected for this meeting so that all may attend with a minimum of effort. The Council of the State Association has assumed the cost of this meeting so that attendance may be offered free to all members.

Instead of a program of many subjects, two subjects, cardiovascular and neoplastic diseases have been selected. In these subjects every physician must be interested, even though he practices some specialty. Nationally known men will present these subjects in clinics and didactic meetings, not in academic abstraction, but in practical clinics, talks, and discussions of common problems. The meeting has been extended to cover two full days, including evening meetings, instead of one day as formerly. The dates, April 8 and 9, 1936, have been selected with a view to avoiding conflict or close proximity to any other large meeting.

Attendance at a reasonable number of medical meetings is significant of an effort to keep one's medical information dated today. Patients recognize this and often comment favorably upon it. Notice in the local papers of worthwhile medical meetings may well be more important news to the community than much of the social, political, and current comment of news columns. The public is dependent upon its physicians and should be encouraged to become interested in and take pride in the quality of its medical service.

This meeting is being arranged for you. The material to be presented is dated today. Its success depends upon you.

*R. L. Denserwick*



## Indiana Medicine in Retrospect

L. G. ZERFAS, M.D.  
Historian, Indiana State Medical Association



### ASAHEL CLAPP NEW ALBANY, INDIANA

Dr. Asahel Clapp was probably the leading physician and scientist in the early pioneer days of Indiana. He was honored by his election to the presidency of the first State Medical Society, and his diary gives ample proof, even at this time, of his medical sagacity. The work he did and the interest he manifested in the natural sciences brought him in contact with many distinguished men of science. His journals covering various trips to Cincinnati, Pittsburgh, Philadelphia, Boston, and New York give evidence of his wide social contacts.



(Secured through the courtesy of Miss McNitt of the Indiana State Library from a portrait in the possession of Miss Mary Scribner of New Albany.)

We are very fortunate to have the biographical data written and submitted by Dr. R. W. Harris, of New Albany. Dr. Harris was an intimate friend of the late Dr. William Clapp, son of Asahel Clapp, and, because of this fact, obtained not only the valuable material relating to Dr. Asahel Clapp, but in addition acquired a deep understanding and appreciation of this eminent pioneer physician and scientist.

"Born in Hubbardstown, Mass., Oct. 5, 1792.

"Died in New Albany, Ind., Dec. 17, 1862.

"His family moved to Montgomery, Vermont, in his childhood. He studied medicine under the preceptorship of Dr. Chandler in St. Albans, Vermont. I can find no record of his attendance at any medical college nor of his license secured in Indiana to practice medicine. At the time he read under the instruction of Dr. Chandler, as was common usage, after some years' association with a practitioner of medicine, students took up practice on their own responsibility. Such may have been the case with Dr. Clapp.

"Dr. Clapp's first wife was Mary Scribner, who died August 30, 1821, aged seventeen years (recorded on the marker of her grave). One child was born of this marriage, a daughter, Lucinda. Dr. Clapp's second wife, Elizabeth, widow of Nathaniel Scribner, whom he married soon after the death of his first wife, was the mother of Dr. William A. Clapp, who was born October 29, 1822. Six other children were born of this marriage.

"Dr. Asahel Clapp came to New Albany, Indiana, in the year 1817 and offered his professional services to the public at once. The physicians at Vincennes, Indiana, in the year 1817, organized a district medical society and agitated the move for establishing a state medical society which culminated in the organization of same at Corydon, May 10, 1820. Dr. Clapp was elected president for one year which plainly shows his superior mental abilities and acquirements, to stand as he did above the other physicians in attendance. He had been in Indiana only three years at this time and was then only twenty-eight years of age.

"As a practitioner of medicine, Dr. Clapp was far advanced as compared with the average physician of his time. He discovered that venesection was not always the best remedy and very often proved deleterious if a disease continued many days, as he could not replace the blood which had been withdrawn. Transfusion of blood, in his day, was unthought of. He instituted supportive measures early in attacks of fevers, so as to carry his patients through the latter stages of exhaustion. Bacterial infections were unknown and etiology a mystery. The therapeutics of his time were indeed crude and most remedies were useless, if not inert, perhaps harmful, although cinchona bark in tablespoonful doses combined with calomel was the remedy for malaria and is yet.

"His systematic catalogue of the medicinal plants of the United States (a volume of 222

pages), presented to the American Medical Association at its session of May, 1852, and published in the fifth volume of its transactions, refers to and quotes forty-six authors of botanical textbooks, various catalogues, and medical journals. Dr. Clapp considers in detail the medicinal properties of every plant that was known to the medical man of his day. His works are very interesting and entertaining to peruse at this time. As the science of botany advanced, he kept step with the progress, going over his textbooks, correcting the nomenclature, replacing the old orders and families and changing them to their proper places. His books are filled with footnotes and marginal corrections.

"Dr. Daniel Drake visited him quite often. Dr. Oliver Wendell Holmes paid him a visit and delivered a lecture at the lyceum. Dr. Lewis Rogers, of Louisville, seems to have been his chosen friend and consultant. Dr. Clapp prepared hundreds of botanical specimens which were carefully pressed, dried, and mounted. Dr. John M. Coulter, while president of Indiana University, examined them and carried all that he wished to possess to the University and they are probably to be found there to this day. We can judge his high qualities and attainments by the men of his time who visited him. Dr. James Hall made several visits to him and Dr. William Clapp, his son, said every visit made resulted in the disappearance of some of his father's finest and rarest geological specimens. Sir Charles Lyell visited his home April 4, 1846. Here is Lyell's account of his visit: 'The coal measures had given place to older series of strata, the Devonian, when we reached the Falls of the Ohio at Louisville where we saw the river foaming over its rocky bed. I first landed at New Albany, Indiana, nearly opposite Louisville, that I might visit Dr. Clapp and see his splendid collection of fossil corals. He accompanied me to the bed of the river where, although the water was not at its lowest, I saw a grand display of what may be termed an ancient coral reef. April 5, from New Albany, we crossed the river to Louisville—went to visit Dr. Lunsford Yandell (one of the early geologists of this locality)<sup>1</sup>.

"1837, Dr. Clapp was forty-five years old; had resided in New Albany twenty years; was at the zenith of his fame as a physician and a scientist; had met and corresponded with the most eminent botanists of his country such as John Torrey, Asa Gray, Thomas Nuttall, A. W. Chapman, C. T. Rafinesque and others. His fame was such as would satiate the ambition of most men.

"The halo surrounding Dr. Clapp was to last all his days. Sir Charles Lyell, the most distinguished geologist of England, was to visit him. James D. Dana, our most noted crystallographer and geologist, was yet to call and pay his respects. James D. Dana, our most noted crystallographer

visits. Dr. Clapp was to continue his studies as assiduously as ever and after his sixtieth year to take up the study of the German language so as to be able to read the geological works of Professor Goldfuss.

"The great amount of original work and investigation in science were to place him in the first rank of the men of his day and time. His unusual and fine collection of geological specimens was donated to Harvard to be kept intact as the Clapp Collection. I have never known an Indiana graduate of Harvard who had seen or heard of this most valuable collection.

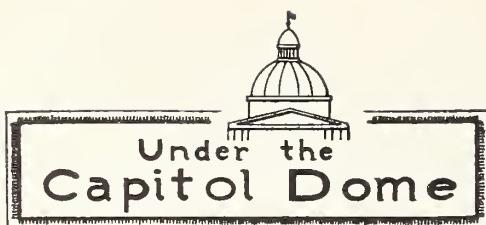
"Dr. Clapp attended the medical convention of 1849 which met in Indianapolis and organized the Indiana State Medical Society, was elected vice-president, and the following year elected president of the Society.

*Mar. 22 1835 left New Albany for Boston in company with Mr. Clapp, H. Greenbank & wife who were going on a visit to Concordia - took passage on the Am. Franklin boat crowded with passengers  
 Tuesday 23 Arrived at Cincinnati a little after the sun rose and stopped at the Pearl St House - Weather extremely bad - rain & sleet. Called at the Wheel and Spoke and Dr. Clark.  
 Wednesday 24th Arrived at Cincinnati a little after the sun rose and stopped at the Pearl St House - Weather extremely bad - rain & sleet. Called at the Wheel and Spoke and Dr. Clark.  
 Thursday 25th Weather still colder than yesterday Thurs. 6  
 Called on Dr. Drake who returned it and spent some time with us at the Pearl St House - Took passage on the Am. Franklin about 10 o'clock for Pittsburgh, and left a few minutes past 3 P.M.  
 Friday 26th Weather still worse - nearly 60 in the cabin most of the morning - rain & sleet - Philadelphia Friday and Saturday at Guyandot -  
 Saturday 27th Weather still worse - rain & sleet - The boat was stopped by the ice -  
 Sunday 28th Weather still worse - rain & sleet - The boat was stopped by the ice - The boat was taken into the Guyandot  
 Monday 29th Weather still worse - rain & sleet - The boat was taken into the Guyandot  
 Tuesday 30th Weather still worse - rain & sleet - The boat was taken into the Guyandot*

A page from one of the many diaries kept by Dr. Clapp.

"Dr. Clapp was a great man, one of the greatest in the early medical history of Indiana. His brain never seemed to crave any rest; always at work. He wished to know, and did know. His mental industry was remarkable, calling to one's mind the life of Benjamin Franklin. He was a religious man, and one wonders what his reactions would have been to the theory and writings of Charles Darwin. He had delved deeply enough into science to see the whole story of evolution. Maybe he would have sided with Agassiz in a special creation for each geological epoch. His make-up was that of a careful and timid man, never venturing far on an uncertain and untried venture. He made the world better for having lived."

<sup>1</sup> See Lyell's *Travels in the United States, Second Visit*. Vol. II, pp. 207-209.



SOCIAL SECURITY AND THE SPECIAL LEGISLATIVE SESSION  
"DOG HAIR AND DYNAMITE" WITH US AGAIN

Preparations are being made for a special session of the state legislature to enact statutes which will enable Indiana to conform to the provisions of the Federal Social Security Act. So far-reaching and so broad are the principles laid down by the Federal Social Security Act, and such latitude is given the individual states in writing their own legislative tickets that what transpires at this special session will be of vast importance to every Hoosier physician, both as a citizen and as a practitioner of medicine.

Several months ago the members of the majority party in the Senate held a caucus-conference at which the sensible agreement was made by those senators present that nothing should be considered at the special session except those proposals which were directly pertinent to the Federal Social Security Act, and which would make the Indiana laws conform thereto. It was the consensus of opinion of that conference that the necessary bills should be drawn by a special committee composed of members of the General Assembly, with each of the twelve congressional districts represented.

Shortly after that conference, Governor Paul V. McNutt appointed a committee of experts to study and formulate the necessary legislative measures. This committee completed its work early in February, and on Lincoln's birthday, the bills as prepared by the experts were presented to a joint committee composed of twelve senators and twelve representatives.

Senator Walter Chambers of Newcastle, chairman of the joint committee, explained to the committee that some five measures had been drawn up, and that the committee would consider them one at a time, starting with the longest and perhaps the most controversial measure, the one which proposed the creation of a state welfare board (to supplant the old State Board of Charities) and provided the machinery to administer the provisions of the measure.

It was easy to determine at a glance that the bill was based, not in all respects upon the Federal Social Security Act, but upon the now-famous report published by the Government Economic State Committee, of which our old friend, R. Clyde White, head of the Social Service Training School of Indiana University, was the secretary, and the bill contained all those provisions for centralization of control, all the "dog-hair and dynamite" of

the original report, and those same old proposals which, if enacted, would turn Indiana into a paradise for social service workers. (See editorials "Social Service Racket," page 74, February, 1934, and "Dog Hair and Dynamite," page 238, May, 1935.)

The committee readily sensed all this, and after a short recess came back and started in with the red pencil, and, despite many conflicting newspaper reports, has the situation well in hand.

As THE JOURNAL goes to press, the legislative committee is completing its deliberations, and the first draft of the bills are ready to be printed and distributed to all legislators for their study and consideration before coming to Indianapolis.

When the session starts, the bills are to receive the same legislative consideration as would any other measure that would be presented at a regular session.

The questions are truly momentous; the battle is a crucial one; and the developments have been and continue to be closely followed by the officers, legislative and executive committee men of the Indiana State Medical Association.

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STATE BOARD MEETING

The Indiana State Board of Medical Registration and Examination will meet in the board's offices in the State House Annex on March 20. The session will be a continuation of the January meeting which was recessed.

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STATE BOARD EXAMINATIONS

The State Board of Medical Registration and Examination conducted a clinical examination at the Indiana University Hospital, January fifteenth, for five applicants for Indiana licenses under a reciprocal agreement with the state of Illinois. Those who took the examination and the cities where they will locate to practice medicine are: Dr. William L. Cole, Evansville; Dr. Marion M. Morgan, Evansville; Dr. K. L. Thorsgaard, Richmond; Dr. George W. Seward, North Manchester; and Dr. George L. Venable, North Manchester.

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The State Board of Medical Registration and Examination revoked the Indiana licenses of two physicians who have been practicing outside the state for several years and who are now prisoners in Federal penitentiaries. They are Dr. William J. Porter who is serving a sentence in the Federal prison at Atlanta, Ga., and Dr. Adrian D. Williams, who is serving a sentence at Leavenworth, Kansas. Both were sentenced for alleged violations of the Harrison narcotic act. The Board reinstated Dr. Frederick J. Freshley, whose license was revoked in 1934 following presentation of proper petition. Dr. Freshley will locate in South Dakota, it was said.

## MEDICAL STUDENTS HELPED BY N. Y. A.

Forty-five medical students at Indiana University are earning their way through school by working at jobs provided by the National Youth Administration, according to Edward E. Edwards, state director of the administration. Forty-three of these students are at the Indiana University Medical Center in Indianapolis, and the other two are at Bloomington.

In addition to the medical students, a total of thirty-eight pre-medical students are on the NYA program at the university, Mr. Edwards reported. Although Indiana University is the only school in the state offering medicine, there are a number of pre-medical students in other colleges, some of whom are participating in the National Youth Administration program. The state headquarters, however, has no check of these students.

Seventy dental students at Indianapolis also are participating in the program, Mr. Edwards reported.

## TAX-FREE ALCOHOL

Paul P. Fry, state excise administrator, has sent bulletins to hospitals, sanatoriums, physicians, and dentists calling their attention to the fact that it is compulsory for them to purchase tax-free alcohol from Indiana distillers.

These institutions and individuals are authorized, under the state liquor control laws, to buy, own and dispense for medical, mechanical or scientific purposes only without a permit. Persons who buy alcohol for these purposes may obtain forms for that purpose from the excise department.

"There is no limitation as to the amount that you may purchase in any one year," the bulletin said. "However, there is a limitation that no person exempt from payment of permit fee has the privilege of importing alcohol into this state. Therefore, it is necessary that you purchase your alcohol within the state of Indiana."

"Information has been received by this department that the Federal Government will not allow anyone other than the distillery to sell government tax-free alcohol, that is, the wholesale drug firm or wholesale supply house cannot sell to hospitals U. S. Government tax-free alcohol. Then since there is a limitation upon your importation, it is compulsory that you purchase your supply from Indiana distillers of alcohol," the bulletin said.

## OSTEOPATHIC PODIATRY

A regularly licensed osteopath may legally practice in the field of podiatry, but he may not advertise himself as a podiatrist, according to an opinion issued by Philip Lutz, Jr., attorney general, to D. R. Tucker, president of the state board of podiatry examiners. An osteopath "is not prohibited from practicing osteopathy when the

practice pertains to the foot any more than he is limited to the practice of osteopathy on any other part of the human body," the opinion said. "He does it, however, as an osteopath and not as a podiatrist," the opinion continued. "He would not be permitted to advertise himself as a podiatrist."

Chiropractors, however, cannot legally practice podiatry in the same manner, the opinion held. Legally chiropractic is a system of treating diseases by manipulation of the spinal column and the field is thus limited, the opinion set out. Treatment of foot ailments and prescription of arch supports and other mechanical devices for relief of foot diseases would constitute a violation of medical laws, Attorney General Lutz said. The actual sale of arches and other devices as merchandise, however, is not in itself a violation, but the prescribing of the particular kind needed constitutes the violation.

Indiana has made the best record of all states in protecting workers on Works Progress Administration projects from injury, according to a report received from Washington by the State WPA. Illinois ranked second and Utah third. In a total of 12,036,086 man-hours worked in Indiana only one fatal accident occurred, and there were only 177 injuries to workers serious enough to cause them to lose time from their work. Fifty of the time-lost injuries were caused by accidents while handling objects, twenty-nine were caused by falls and the rest were due to miscellaneous causes.

## PERMITS ISSUED BY THE STATE BOARD OF MEDICAL REGISTRATION AND EXAMINATION

Following is a list of reciprocal permits and certificates issued during the period from 10/1/35 to 12/31/35, inclusive:

## TEMPORARY PERMITS

	Date of Issue
Edward E. Edmondson	10/11/35
Leslie M. Jones	10/24/35
Lawrence J. DeSwarte	10/30/35
Hugh W. Eikenberry	11/7/35
Edward J. Purchla	11/7/35
Morris R. Wiedner, Jr.	11/7/35
Ralph A. Elliott	11/7/35
Edward L. Rigley	12/17/35

## PERMANENT CERTIFICATES

	Date of Issue
Joseph W. Strayer	10/21/35
Robert E. Downing	10/28/35
Russell K. Ameter	11/7/35
Marvin H. Sandorf	11/18/35
Wm. H. Clark	11/18/35
Catherine E. Logan	11/19/35
Hawthorne C. Wallace	11/20/35
Wilbur C. McCormick	11/22/35
Helen L. Jackson	11/29/35
Grace A. Seyler	12/2/35
Arthur G. Blazey	12/6/35
Walter W. Springstun	12/11/35
Wm. E. Callison	12/16/35
Albert Heard	12/23/35

## DIPHTHERIA DEATHS IN JANUARY, 1936

Diphtheria deaths for the month of January, 1936, are most discouraging; there are 26. Of this number, 16 were definitely of pre-school age, 5 of the number being 1 year old. Eight children were of school age, but of this number 2 were given as 6 years of age, which is barely school age. There were two adults, 20 and 53 years of age.

From these figures it seems that a serious situation is before the people and the profession. Of the total for the month, 10 had a definite diagnosis of laryngeal diphtheria. Evidently membranous croup is still with us, and it will be well for each doctor to regard a severe case of croup with sharp suspicion. Several of the certificates also have the additional information that myocarditis was the terminal condition. It will be well to remember that the patient convalescing from diphtheria has a very weak heart and is extremely subject to this complication.

The deaths by counties for the month of January, 1936, are given below:

County	No. for Month January, 1936
Allen	2
Brown	2
Clark	1
Dubois	1
Elkhart	1
Grant	1
Greene	1
Howard	1
Jennings	1
Lake	1
Lawrence	1
Madison	2
Marion	3
Montgomery	1
Parke	1
Ripley	1
St. Joseph	2
Vanderburgh	1
Warren	1
Washington	1

### INDIANA DIVISION OF PUBLIC HEALTH

#### BUREAU OF COMMUNICABLE DISEASES

Monthly Report, January, 1936

Diseases	Jan. 1936	Dec. 1935	Nov. 1935	Jan. 1935	Jan. 1934
Tuberculosis	150	135	125	84	167
Chickenpox	491	402	407	529	907
Measles	231	53	41	1,744	1,432
Scarlet Fever	1,345	914	682	793	998
Smallpox	16	13	11	10	14
Typhoid Fever	6	13	11	12	6
Whooping Cough	139	185	130	174	182
Diphtheria	177	207	201	202	191
Influenza	199	142	104	687	329
Pneumonia	251	133	72	109	83
Mumps	379	163	103	32	131
Poliomyelitis	3	1	9	0	1
Meningitis	13	17	6	5	10
Trachoma	1	1	0	1	6
Encephalitis	1	1	0	3	0

## SECRETARIES' COLUMN

The annual secretaries' conference this year was one of the largest ever held in point of attendance. The faces of those present showed such keen interest in the topics presented that I am sure all felt well repaid for the time spent at this meeting.

I want to thank all who were on the program for their time and work in preparing and presenting their subjects.

One very excellent idea brought out at the secretaries' conference was that all economic work of the medical profession should be carried on by men qualified and regularly employed for the work, and not by professors, research workers, or practitioners of medicine whose time is taken up by arduous scientific and curative work.

The subject of medical ethics was well presented, and the statement was made that if all physicians would live up to the Code of Ethics, the medical profession would be as a stone wall in its organized unity.

It was pointed out that no one plan may be put into operation that would fit the needs of all communities, but each community should adopt its own plan. The plan of Marshall County, Iowa, for the care of the indigent, was mentioned as a very good pattern.

Do not forget to send in your list of exchange speakers—and do not forget to have at least one meeting for the presentation and discussion of Cardiovascular Diseases and Neoplastic Diseases.

The postgraduate program will be presented April 8th and 9th in Indianapolis. Mark your calendar now and plan to be in attendance.

Read the report of the Judicial Council of the American Medical Association on page 300 in the January 25, 1936, issue of *The Journal of the A. M. A.* In the same issue, on page 322, read the article entitled, "Taxation of Physicians and Hospitals Under the Social Security Act."

How many of your members are delinquent? Step on them! This year, 1936, is an important year for medicine!



Chairman.

## DEATH NOTICES



William S. Tomlin, M.D.

WILLIAM S. TOMLIN, M.D., prominent otolaryngologist of Indianapolis, died January twenty-seventh at his home in Indianapolis. Dr. Tomlin was sixty-seven years of age.

Dr. Tomlin always had been an active worker in medical organization, and served as chairman of the Section on Ophthalmology and Otolaryngology of the Indiana State Medical Association in 1933, and was general chairman of arrangements for the 1927 annual meeting of the Association.

Dr. Tomlin had served on the staffs of the Methodist, St. Vincent's, St. Francis, and City Hospitals in Indianapolis. He was one of the organizers and a charter member of the Indiana Academy of Ophthalmology and Otolaryngology and of the Indianapolis Academy of Ophthalmology and Otolaryngology, and had served as president of both societies.

Dr. Tomlin was a member of the Indianapolis Medical Society, the Indiana State Medical Association and a Fellow of the American Medical Association, and the American College of Surgeons. He held membership in the American Academy of Ophthalmology and Oto-Laryngology and held the certificate of the American Board of Otolaryngology. He graduated from the University of Louisville School of Medicine, Louisville, Kentucky, in 1892.

J. WILLARD PARRISH, M.D., of Shelbyville, died January 25, aged seventy-six years. Dr. Parrish had practiced in Shelbyville since 1910, and had served as county health commissioner, which office he held for twelve years. He graduated from the Medical College of Indiana, Indianapolis, in 1896.

HUGO O. PANTZER, M.D., of Indianapolis, died February fourteenth, aged seventy-seven years.

Dr. Pantzer located in Indianapolis in 1878, studying medicine in the Indiana Medical College from which he graduated in 1881. He practiced general medicine until 1892, when he began to specialize in surgery and gynecology, later becoming a member of the faculty of the Central College of Physicians and Surgeons of Indianapolis and the Indiana Medical College of Indianapolis.

Dr. Pantzer spent considerable time doing post-graduate work in Europe and had studied under many famous teachers. He was an honorary member of the Indianapolis Medical Society and for many years was a member of the Indiana State Medical Association, the American Medical Association, and the International Medical Congress. Dr. Pantzer retired from active practice in 1932.

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A. A. KESTER, M.D., of Fort Wayne, died January first, aged ninety-three years. Dr. Kester was a veteran of the Civil War, and had practiced in Garrett, Indiana, until his retirement.

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THOMAS MACER, M.D., of Evansville, died February 1, aged seventy-five years. Dr. Macer had practiced in Evansville for fifty years. He graduated from the Eclectic Medical College in Cincinnati, in 1884.

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ADA A. FOWLER, M.D., of Marion, died January twenty-third, aged seventy-seven years. Dr. Fowler had practiced in Marion for thirty-five years. She graduated from the Hahnemann Medical College and Hospital, Chicago, in 1889.

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GEORGE I. INLOW, M.D., of Manilla, died January twenty-second, aged sixty-one years. Dr. Inlow had practiced at Blue Ridge, and while there was made coroner of Shelby County, which office he held for twelve years. He was a member of the Rush County Medical Society, the Indiana State Medical Association and the American Medical Association. Dr. Inlow graduated from the Kentucky School of Medicine, Louisville, in 1897.

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FRANK B. THOMPSON, M.D., of Lafayette, died February 1, aged seventy-nine years. Dr. Thompson had practiced in Lafayette for fifty years. He was a member of the St. Elizabeth and Home Hospital staffs, and was an honorary member of the Tippecanoe County Medical Society, Indiana State Medical Association, and a Fellow of the American Medical Association and the American College of Surgeons. He graduated from the Starling Medical College, Columbus, in 1882.

DELZIE ROY LEE, M.D., of Indianapolis, died January third, aged forty-five years. Dr. Lee had practiced in Indianapolis for fourteen years. He graduated from the University of Louisville School of Medicine in 1916, and was a member of the Indianapolis Medical Society, the Indiana State Medical Association, and a Fellow of the American Medical Association.

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ALBERT G. GRUBB, M.D., of LaGrange, died January eleventh, aged seventy-four years. Dr. Grubb retired from active practice six years ago.

In 1918 Dr. Grubb entered the medical corps of the United States Army, and received the rank of captain. He graduated from the University of Illinois College of Medicine, Chicago, in 1892.

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OMER D. HUTTO, M.D., of Kokomo, died January 26, aged fifty-six years. Dr. Hutto had practiced in Kokomo for twenty-nine years, and was a member of the Howard County Medical Society, the Indiana State Medical Association, and a Fellow of the American Medical Association. He graduated from the Indiana Medical College, School of Medicine of Purdue University, Indianapolis, in 1906.

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JOHN V. KERRIGAN, M.D., of Michigan City, died February 11, aged fifty years. Death was caused by pneumonia. Dr. Kerrigan had conducted a surgical practice in Michigan City since 1910. During the World War he served in the Medical Corps of the United States Army, spending several months over-seas. He graduated from the Northwestern University Medical School, Chicago, in 1908, and was a member of the LaPorte County Medical Society, the Indiana State Medical Association and a Fellow of the American Medical Association.

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JOHN G. KINNEMAN, M.D., of Goodland, died January 30, aged sixty-seven years. Dr. Kinneman located in Goodland in 1898 and had conducted his practice there since that time. He graduated from the Medical College of Indiana, Indianapolis, in 1898, and was a member of the Jasper-Newton County Medical Society, the Indiana State Medical Association, and a Fellow of the American Medical Association.

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RUSSELL EUGENE MILLER, M.D., of Akron, died February 3, aged twenty-nine years. Death resulted from pneumonia. Dr. Miller graduated from the Indiana University School of Medicine in 1930, and was a member of the Fulton County Medical Society, the Indiana State Medical Association, and the American Medical Association.

## HOOSIER NOTES

Dr. F. T. Romberger, of Lafayette, spent a February vacation in Florida.

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Dr. E. E. Padgett, of Indianapolis, addressed members of the Franklin Rotary Club, January twenty-second, on "Socialized Medicine."

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Dr. and Mrs. J. V. Prouty have moved from Terre Haute to Cedar Rapids, Iowa, where they will make their home. Dr. Prouty will be associated with an x-ray specialist in Cedar Rapids.

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A fire in Franklin, January twenty-third, destroyed property to the extent of \$30,000, including the offices and equipment of Dr. Walter L. Portteus.

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Dr. B. E. Lemmon, formerly of Spencer, has opened an office in Martinsville where he will conduct a general practice.

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Dr. P. T. Lamey and Dr. W. L. Sharp have opened offices on the fourth floor of the Citizens Bank Building in Anderson.

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Dr. C. F. Kercheval has moved from Rome City to Greentown.

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Dr. D. S. Adams of Indianapolis has taken over the office and practice of the late Dr. William S. Tomlin at 520 Hume Mansur Building.

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Dr. Keith E. Selby of South Bend sailed February 15 from New York City for a two-month stay in Europe, most of which will be spent in study in Vienna.

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Dr. L. M. Hughes, who has been practicing at Brooklyn, Indiana, has moved to Paragon, where he will continue his general practice.

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Dr. Walter W. Gipe of Greentown has moved to Kokomo, where he has taken over the office and practice of the late Dr. O. D. Hutto.

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Dr. Marion C. Aker, of Ritzville, Washington, died January twentieth. Dr. Aker was a graduate of the Indiana University School of Medicine in 1934, and had engaged in general practice in Ritzville.

Dr. J. S. Skobba, resident physician at the Fort Wayne State School, has been transferred to the Central Hospital for Insane at Indianapolis.

The Sullivan County Medical Society gave a dinner in honor of Dr. Walter N. Thompson, February 14; Dr. Thompson has completed fifty years of medical practice in Sullivan County. Details of the meeting are reported under "Societies and Institutions" in this issue.

Dr. P. T. Lamey of Anderson and Miss Marion Whetsell of Bedford were married in Indianapolis February 7.

Dr. Charles J. Brockway and Dr. R. B. Wetherill of Brookston have returned from a five weeks' tour of Old Mexico and the southwestern United States. Their trip included stops in New Orleans, Vera Cruz, Mexico City, San Antonio, Los Angeles, San Francisco, and the Grand Canyon.

Dr. and Mrs. N. C. Reglien have moved from Three Oaks, Michigan, to Michigan City, where Dr. Reglien will continue his practice.

Dr. and Mrs. Eugene L. Bulson of Fort Wayne sailed February 7 from New York for a seventeen-day cruise to the West Indies.

Dr. C. E. Stouder has moved from Bedford to Amo, where he will practice.

Dr. W. L. Sharp of Anderson and Miss Blanche Chanley of Indianapolis were married December 7.

Dr. W. U. Kennedy, of New Castle, addressed members of the Rushville Rotary Club, January fourteenth, explaining why physicians are opposed to state medicine.

The Evansville Post-Graduate Group met January twenty-eighth at the Vendome Hotel, to hear Dr. Sumner L. Koch, of Chicago, talk on "Infections of the Hand."

The establishment of an auxiliary to the St. Joseph County Medical Society, under the leadership of Mrs. Milo K. Miller, will be undertaken early in March.

The sixth international congress on physical medicine will be held at London, May 12-16, 1936. Dr. Richard Kovacs, 1110 Park Avenue, New York, is executive of the American committee. Details concerning the congress may be obtained from him.

The American Congress of Physical Therapy has announced that its midwestern sectional meeting will be held at The Mayo Clinic, March fourth and fifth. Dr. Charles W. Mayo will deliver an address

of welcome. Complete program may be obtained from the secretary, Marion G. Smith, 30 North Michigan Avenue, Chicago.

The Clinical Society of Genitourinary Surgeons, with a membership limited to twenty-five, met in Indianapolis for an annual clinic meeting January 31. Sessions were held at the Indiana University School of Medicine. Members were guests of Dr. Homer G. Hamer of Indianapolis.

An auxiliary to the Floyd County Medical Society was organized at a meeting in the New Albany Public Library, Thursday, January 9. Mrs. George R. Dillinger, state chairman of organization for the Auxiliary to the Indiana State Medical Association, was in charge. Mrs. James Baxter, Jr., was elected president of the auxiliary; Mrs. Carl Schoen was made vice-president; Mrs. Parvin Davis, secretary; and Mrs. William L. Starr, treasurer. The auxiliary holds luncheon meetings on the first Friday of each month.

The United States Public Health Service will consider applications to fill a number of vacancies which exist at present, and also vacancies which will occur about July first, for second year medical internes. Any young physician not over thirty years of age, who has graduated from a Class "A" medical college and who has completed or will shortly complete one year's internship in an approved hospital is eligible to apply. Inquiries should be addressed to the Surgeon General, U. S. Public Health Service, Washington, D. C., stating the date applicant will be available for duty, and proper blanks will be supplied for application.

The American College of Surgeons 1936 sectional meeting will be held in Louisville, Kentucky, March 19, 20, and 21, with headquarters at the Brown Hotel. Participating states will be Kentucky, Illinois, Indiana, Ohio, West Virginia, Virginia, Tennessee, and Missouri. An invitation to attend this meeting is extended not only to the Fellows of the College in the various states included, but to the entire medical profession at large. The programs include technical and educational exhibits, operative clinics, hospital conferences, medical motion pictures, scientific sessions, and round-table conferences. Distinguished visitors will include Dr. George Crile, Cleveland; Dr. A. W. Adson, Rochester, Minn.; Dr. Frank E. Adair, New York; Dr. Charles L. Scudder, Boston; Dr. F. W. Bancroft, New York; Dr. Francis L. Lederer, Chicago; Dr. Michael L. Mason, Chicago; Dr. F. A. Besley, Waukegan; C. C. Little, Sc.D., New York; Dr. M. T. MacEachern and Dr. Bowman C. Crowell, Chicago; and Robert Jolly, Houston.

## SOCIETIES — INSTITUTIONS

### INDIANA STATE MEDICAL ASSOCIATION

#### SECRETARIES' CONFERENCE

Minutes of the Secretaries' Conference will be published in April. Attendants at the meeting are listed below, and papers presented at the Conference by Drs. F. S. Crockett, L. T. Rawles and O. O. Alexander are published herewith. Comments by other speakers will appear in the minutes of the meeting.

The following officers and members of county medical societies registered for the annual conference of secretaries in Indianapolis, February second.

#### **Allen County**

D. F. Cameron, Ft. Wayne  
W. W. Duemling, Ft. Wayne, Sec'y.  
C. B. Parker, Ft. Wayne  
H. A. Ray, Ft. Wayne, Pres.  
L. T. Rawles, Ft. Wayne  
E. M. Van Buskirk, Ft. Wayne  
W. C. Wright, Ft. Wayne  
J. L. Wyatt, Ft. Wayne

#### **Grant County**

G. R. Daniels, Marion  
Russell Lavengood, Marion  
H. E. List, Marion, Sec'y.  
E. F. Jones, Marion, Pres.

#### **Greene County**

Sam Rotman, Jasonville

#### **Hancock County**

Joseph L. Allen, Greenfield, Sec'y.  
R. E. Kinneman, Greenfield, Pres.

#### **Harrison County**

William Amy, Corydon

#### **Hendricks County**

M. M. Aiken, Plainfield, Pres.  
W. T. Lawson, Danville, Sec'y.  
O. T. Scamahorn, Pittsburg

#### **Henry County**

W. U. Kennedy, Newcastle, Pres.  
J. H. Stamper, Middletown

#### **Jackson County**

George H. Kamman, Seymour, Sec'y.

#### **Jasper-Newton County**

W. C. Mathews, Kentland, Sec'y.

#### **Jay County**

John Lansford, Redkey, Pres.  
B. M. Taylor, Portland, Sec'y.

#### **Jennings County**

W. L. Grossman, North Vernon  
W. O. Hildebrand, Topeka, Sec'y.

#### **Lake County**

E. M. Shanklin, Hammond, Sec'y.

#### **LaPorte County**

W. B. Martin, LaPorte, Sec'y.

#### **Lawrence County**

L. H. Allen, Bedford, Sec'y.  
Charles B. Emery, Bedford, Pres.

#### **Dearborn-Ohio County**

J. C. Elliott, Guilford, Pres.  
J. M. Pfeifer, Lawrenceburg, Sec'y.

#### **Delaware-Blackford County**

C. L. Botkin, Muncie  
J. H. Clevenger, Muncie, Pres.  
Donald A. Covault, Muncie, Sec'y.

#### **T. R. Owens, Muncie**

#### **DeKalb County**

J. P. Showalter, Waterloo

#### **Elkhart County**

J. M. Feming, Elkhart  
S. T. Miller, Elkhart, Sec'y.

#### **Fountain-Warren County**

A. L. Spinning, Covington, Sec'y.

#### **Gibson County**

C. M. Clark, Oakland City, Pres.  
O. M. Graves, Princeton, Sec'y.

#### **Madison County**

M. A. Austin, Anderson, Sec'y.  
E. E. Hunt, Pendleton, Pres.

#### **Marion County**

E. O. Asher, New Augusta  
Paul Beard, Indianapolis

H. F. Beckman, Indianapolis

C. J. Clark, Indianapolis

E. D. Clark, Indianapolis

C. G. Culbertson, Indianapolis

C. W. Day, Indianapolis

Frank Gastineau, Indianapolis

W. D. Gatch, Indianapolis

V. K. Harvey, Indianapolis

Mr. L. B. McCracken, Indianapolis

K. R. Ruddell, Indianapolis, Pres.

Howard B. Mettel, Indianapolis, Sec'y.

R. E. Mitchell, Indianapolis

C. A. Nafe, Indianapolis

E. E. Padgett, Indianapolis

K. R. Ruddell, Indianapolis, Pres.

Mr. Ralph Scheidler, Indianapolis

Ada E. Schweitzer, Indianapolis

J. W. Scott, Indianapolis

L. L. Shuler, Indianapolis

W. T. Waits, Indianapolis

A. F. Weyerbacher, Indianapolis

H. H. Wheeler, Indianapolis

James V. White, Indianapolis

#### **Marshall County**

T. C. Eley, Plymouth, Pres.

#### **Montgomery County**

George Collett, Crawfordsville

Robert J. Millis, Crawfordsville, Pres.

John L. Sharp, Crawfordsville, Sec'y.

#### **Monroe County**

Dillon Geiger, Bloomington, Sec'y.

Melville Ross, Bloomington, Pres.

#### **Morgan County**

Charles L. Aker, Mooresville

G. L. Sandy, Martinville, Sec'y.

Sec'y.

W. J. Stangle, Mooresville, Pres.

#### **Noble County**

Walter F. Carver, Albion, Sec'y.

#### **Orange County**

George Dillinger, French Lick, Sec'y.

Parke-Vermillion County

Paul B. Casebeer, Clinton, Sec'y.

S. C. Darroch, Cayuga

C. S. White, Rosedale

#### **Porter County**

P. M. Corboy, Valparaiso, Sec'y.

S. E. Dittmer, Kouts, Pres.

#### **Randolph County**

L. W. Painter, Winchester, Pres.

F. M. Ruby, Union City, Pres.

#### **Ripley County**

R. Lee Smith, Osgood, Pres.

#### **Rush County**

Donald I. Dean, Rushville, Sec'y.

R. O. Kennedy, Rushville

#### **St. Joseph County**

J. V. Cassady, South Bend, Sec'y.

W. B. Christophe, Mishawaka

H. D. Pyle, South Bend

George Rosenheimer, South Bend

R. L. Sensenich, South Bend

M. D. Wygant, Mishawaka

H. C. Wurster, Mishawaka

#### **Shelby County**

R. M. Nigh, Shelbyville, Sec'y.

M. A. Wells, Fairland, Pres.

#### **Sullivan County**

M. H. Bedwell, Sullivan, Sec'y.

J. H. Crowder, Sullivan, Pres.

J. T. Oliphant, Farmersburg

#### **Tippecanoe County**

J. C. Burkle, Lafayette, Sec'y.

F. S. Crockett, Lafayette

M. G. Frasch, Lafayette, Pres.

Mr. John Munger, Lafayette

#### **Tipton County**

E. B. Moser, Windfall, Sec'y.

#### **Vigo County**

O. O. Alexander, Terre Haute

H. W. Bopp, Terre Haute, Pres.

C. N. Combs, Terre Haute

W. H. Miller, Terre Haute

A. M. Mitchell, Terre Haute, Sec'y.

#### **Wabash County**

Minnetta Jordan, Wabash, Pres.

A. J. Steffen, Wabash, Sec'y.

#### **Washington County**

A. M. Baker, Salem, Sec'y.

D. L. Colglazier, Salem, Pres.

C. B. Paynter, Salem

#### **Wayne-Union County**

W. M. Barton, Centerville

G. J. Hunt, Richmond

L. A. Stamper, Cambridge City

#### **Guests from Out of the State**

Dr. E. A. Meyerding, St. Paul, Minn.

Dr. Olin West, Chicago

Dr. Albert McCown, Washington, D. C.

Dr. Austin Hayden, Chicago

Mr. Ross Garrett, Washington, D. C.

Dr. F. E. Elliott, Brooklyn-N. Y.

**WORK OF THE LIAISON COMMITTEE WITH  
THE TOWNSHIP TRUSTEES**

**F. S. CROCKETT, M.D.  
LAFAYETTE**

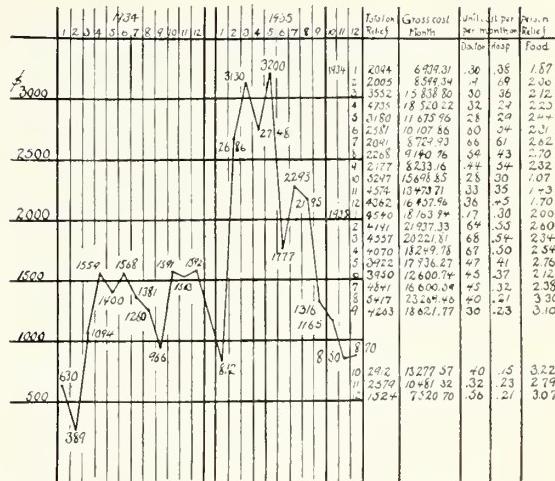
In previous depressions, indigency was a problem of the big cities. The story of bread lines and soup kitchens seemed a thing far apart, very distant from our everyday living. The present depression has brought these big city problems of an earlier day into every community, right onto our own doorsteps. The story of the depression as written in my county during these last four trying years is perhaps a fair sample of the problems faced by practically every other county in the state. Details, of course, vary in practically every instance.

Before the depression, we had a constant load of 60 to 70 families whose utter lack of the squirrel instinct kept them contentedly dependent upon the township in any and all emergencies. Between emergencies they eked out a scanty but carefree living, doing the odd jobs of the more provident while the surprise element of their lives, the joy of the unexpected, was found for them in running the trout line morning and evening—a truly Bohemian or Gypsy life, not without its compensations through freedom from many of the cultural restraints that burden membership in the upper strata of society.

To this group alone of all our citizens have the past four years been flowing with milk and honey. They have known no depression. The Trustee had always provided medical care for this group by contracting with some physician, usually in the lower age brackets, whose party affiliations seemed to justify the confidence and trust imposed. When those in temporary need through unemployment reached numbers beyond all expectation, the medical emergency was at first met by employing more doctors. This measure, together with the gratuitous work given by the balance of the profession, sufficed to meet the needs of the moment during the early part of the recent economic depression.

The chronically indigent exhibit no desire to exercise the privilege of choice of physician. This has never been a psychological factor of importance to them. With the sudden influx of large numbers in temporary need through unemployment, the situation was entirely different. This new element comprised people who had had their family physicians in the past and they had, on the whole, paid according to their ability for this privilege of selection. Our county society took cognizance of this rather violent disruption of physicians' practices. Through appropriate committee action, the local authorities were asked to discontinue the time-honored contract practice and deal with the society and through it the members on a piecework basis. We met resistance through the argument of increased costs that seemed inherent in the new plan.

The recent law creating a Governor's Commission on Unemployment Relief had given them certain authority and supervision over the township trustees. Previously the trustee had been the sole overseer of the poor from whose decisions it was difficult to appeal. Now the trustee suddenly found himself the low man with the Governor's Commission and district chairmen above him. There were many arguments in our plea to the Governor's Commission asking for a change to the county society group plan such as those based on public policy, the psychology of the sick in preferring their old family doctor and that this plan was designed to make the transition back to citizenship on a paying basis an easy and logical one. The point that proved the determining one in influencing their acceptance of our plan was this: "Was the contract method providing adequate medical care?" Our presentation to the Governor's Commission of evidence showing that the system of employing one doctor and adding others as the load increased could not possibly give adequate care approximating that obtainable through using the old family physician in each instance, convinced them that some improvement or change was justified. The new system was in vogue for two years. Twenty-one months of this period has been subjected to considerable statistical review.



The graph covers the two years 1934-1935, divided into months designated by numbers at the top. The total dollars paid to doctors each month is given on the graph. The first column of figures to the right shows the total number of individuals on relief for the month, numbered at the left of this column.

The second column of figures shows the total cost of all services and supplies given those on relief that month. The next three columns show this total cost broken down to show the unit cost per person on relief for the corresponding month for doctors' services, hospital services, and food.

During all of 1934 and to October 1, 1935, medical service was rendered by the members of the Tippecanoe County Medical Society. October, November, and December, 1935, the service was given by two doctors employed by the trustee with the approval of the County Medical Society.

During this past year the Federal Relief Administration announced a plan for work relief through which all employables would be taken off direct relief and given work of sorts, while those unemployable, for any reason, would remain on direct relief and chargeable to the trustee. It was quite evident from this that we would have a new and greater indigent class, who being now unemployable would probably remain permanently a charge upon the community. We have never felt that the individual so lacking in personal pride and ambition that he becomes chronically indigent has any claim for personal preferences or indulgence. There is nothing in the practice of using contract doctors for his care that outrages any feeling of individual right that we do feel toward those who are now making the struggle back to self-support and independent self-respect.

With these thoughts in mind our Medical Society took action discontinuing the collective method October 1, 1935, and advising the trustee it would be agreeable to the Society for him to care for the new permanent indigent load with contract doctors. We have had the finest cooperation and understanding with our trustees in Tippecanoe County. They have constantly sought to act in conformity with the wishes of the profession and the doctors have been persistent in policing their work so that the costs would not be out of line with the service rendered.

At the meeting at Gary the statement was made, I believe, by President Senenich that the medical care of indigents in many parts of the State was in a very unsatisfactory condition. Further, he believed that much might be done if the whole matter could be approached through conferences between the State Medical Association and the State Association of Township Trustees. Committees were appointed and one such meeting was held. Opinions were freely voiced by the members of both committees, and after a time it seemed wise to collect some information which could serve as the basis of further negotiation. Secretary Hendricks sent out a questionnaire to all county societies to determine:

(1) Sentiment in the local county society toward dealing as a society with the trustee.

(2) From the trustees' standpoint, the cost to the taxpayer, we realized, was the determining factor in any plan proposed. Before any further discussion, it was necessary, therefore, to have some fee schedule submitted before calculations of probable costs could be made. It was logical that the trustees should ask that the usual fee schedule used or customary in private practice in any community should be the guide. In asking for the fee schedule, it was to be understood that the fees finally arrived at were to be some fraction of the regular schedule, mutually agreeable to the county society, the trustee and the Governor's Commission on Unemployment Relief.

(3) Some expression of opinion was asked as to the desirability of the current system of medical relief in vogue in the county questioned.

It is readily seen that the purpose of this questionnaire was:

(a) To find or locate the counties where unsatisfactory relations existed.

(b) To find the number and location of those where better relations existed.

(c) To find, if possible, the causes preventing cooperation.

(d) To enumerate the basic principles upon which all men of good intent and purpose could negotiate. To date, twenty-six, or approximately one-third, of the counties have been heard from.

The two broad principles involved in any negotiation are, briefly: (1) The cost involved. (2) The quality of the medical service rendered.

I believe all will agree that too low a cost results in low quality medical care. Likewise, we can all agree that a cost can be too high. I am willing to concede that expenditure beyond a certain point would not in all probability secure better service. Somewhere between these two extremes there is a cost not too great at which adequate medical care can be rendered without penalizing the doctor. This problem must be approached on the one hand by the physician, who, as a taxpayer, is anxious to keep taxes at the lowest possible point, while on the other hand the trustees must be actuated by a humane desire to see that those hapless people, who must look to him for help, receive medical service that is adequate, and he must be willing to pay a fair price for it.

The elements that enter into this cost of giving the services are exactly those involved in giving any other service. There is a cost expenditure whenever the doctor renders any medical service, and this cost must be paid either by him who receives the service or by him who gives it. It is not unreasonable to believe that the trustee would expect to pay the cost plus a small profit. He would have ample precedent for it in dealings with merchants for fuel, food and clothing. When the trustee buys school books for the children of the poor, he gets no concession in price for larger purchase, but must pay the full price, the same as he who buys but one book. I cite this merely to call attention to precedents already established. This argument is usually countered with the statement that the service could be given by an all-time physician employed at a much smaller cost. I wonder if this statement, so often made, will bear close examination, if an adequate service is to be required? An adequate service does not and cannot imply the use of the cheapest doctor obtainable. It implies a well educated, well trained person with sufficient experience to warrant sound decisions. This is the type of doctor who joined in large numbers when choice of physician was granted as a right to the temporary poor. Perhaps determining just what "adequate" means when we say adequate medical care will make the adjustment of all the other factors quite easy. However, I sense a certain amount of difficulty whenever we attempt to find words to express or set up standards of value for "adequacy."

Just what is the expense or cost element in the rendering of a medical service? Many people seem to act on the assumption that whatever the doctors receive is all profit. I am convinced that this thought is at the bottom of the action of many taxpayers' associations in their repeated demands that the cost of medical care must be reduced. If some authoritative evidence could be established showing the

percentage of medical fees that represent the expense involved in rendering the service, we would find ourselves in a much stronger position in demanding just compensation. The weakness of our position lies in that we have not produced such cost accounting.

In analyzing the answers to the questionnaire, we find that all are in favor of dealing as a society with the trustees, but one stated that they had "tried and got nowhere." Twenty-five answered the second question as to willingness to formulate a fee schedule agreeable to the trustee and the Governor's Commission affirmatively. The third question about fees showed a diversity of opinion. Twelve agreed that their present rates were acceptable even though unsatisfactory. Nine thought fees too low while one said in certain townships the pay was O. K. while in others the arrangement was not. In six only was the general procedure thought to be all right. The rest found the red tape imposed very irksome. It might be added that this red tape is only a foretaste of what should be expected if socialized medicine arrives. Under general remarks, the secretaries unburdened themselves of all the accumulated outraged feelings experienced by their local profession. I am sure you who are here hardly need to have these enumerated. The outstanding difficulty to satisfactory relations seem to be the personality or attitude of many trustees, some of whom were acting in conformity with the wishes of their local taxpayers' association. Is it possible that the doctors who contacted them failed somewhere in sizing up the situation? If they did not, then the only solution could be found in the next election.

The American Medical Association, through its House of Delegates, has given some thought to the present economic difficulty insofar as it affects medicine in view of the agitation for socialization. Realizing the difficulty of passing laws applicable to communities scattered all over the State, varying as they do in their individual problems, encouragement has been given to the working out of plans suited to each community. These plans should originate in the County Society designed to meet the special problems of that community. A year ago some 150 such plans were being tried in counties scattered all over the Union. From the working experience of these trial plans, much interesting information has been gleaned. You have just listened to one of them, the Washington plan. It is possible that in those counties where the present situation warrants it, some new plan based upon these many experiments might be evolved to meet the situation. But, no matter what plan is tried, the organizing genius and cooperative ability of the local doctors will be found an important factor in its success.

An old need that is now becoming vocal in some rural communities is the injustice of the present method of charging for calls in the country. The feeling expressed is that the farmer is penalized unjustly when he must pay five, ten, fifteen or twenty dollars for a call for which the city dweller pays only two or three dollars. During the past few years, no doubt, this system has meant unusual hardship and perhaps denial of medical care in many instances. Through the recent action of the American Farm Bureau Federation, the American Medical Association has been invited to cooperate in a study of this situation in the hope that some solution may be found. We can have only the greatest sympathy toward the problem which affects the health and happiness of some of our most dependable and conservative citizens. This problem should be canvassed by all our county societies since any solution found must meet the local condition within each county.

#### THE LOCAL SOCIETIES AND HIGH SCHOOL DEBATES

L. T. RAWLES, M.D.

FORT WAYNE

Organized medicine has recently been shaken until she is partially awakened from that state of lethargy she has been so complacently reposing in for so long; she refused to awaken when the first alarm sounded, blinking an eye at later calls, until now, finally, she has one eye open and is struggling to open the other. Will organized medicine become sufficiently

aroused to throw off the covers she has been so snugly sleeping under, and get out and get dressed and into action before it is too late; or will she first move one foot, then the other, then sit on the side of the bed and think about it until too late? During this time, at the scene of action in our state and national legislative bodies, laws will have been passed and the curtain rung down on the final act—organized medicine will have missed the whole show. You can wind and set your alarm clock and it will get you out in due time to catch your train if you move when it tells you to, but if you turn a deaf ear to its repeated warnings and half slumber on after the first tinkle, then finally sleep through subsequent warnings, the train will be gone, and you? Well! You have just lost out.

Organized medicine was warned many years ago. When Bismarck socialized medicine soon after he became the ruler of the German people, the German movement was set on foot. Then, in fairly rapid succession, one nation after another fell in line in the socializing of this and that and the other institutions including medicine, until Continental Europe, including the British Empire, were all under a socialized regime including medicine. Of course it is true that not all the various countries have the same system, but each has a system, and most of these systems almost completely subsidize the physicians of these countries. During this time, we Americans have sat complacently by our firesides, smoking our pipes, and saying with Sinclair Lewis, "It Can't Happen Here."

Socialistic forces have been invading our country in larger numbers each year for some time past. First it was the soap-box orator; then he rented a hall; now he is in every walk of life; you will find him in the church, the school system, the labor organizations, in the Christian associations; in fact, you will find him almost any place if you but look, always working his propaganda, always "boring from within." His is not the ordinary pitter-patter of a disconsolate soul; his is a smooth, well-formed piece of propaganda that has been thought through, rehashed and dressed down to, in most cases, a rather finished article. He does his work mostly among the better class of labor and industries; he also works on people in all walks of life, forming groups here and there that grow, usually in proportion to the amount of work and unemployment. That the socialist is not found on the corner, or in the park, as much as formerly, is probably because you find him in our centers of learning. You find him on the faculties of some of our leading universities. You find him teaching the subjects of his courses which may embrace the lives and works of such men as Marx, Lenin and others; the history of socialism; the history of Russia under the old and new regimes; you will find the teaching of all kinds of social history from the earliest up to date. This is perfectly right and just that these subjects should be taught, but they should be taught in the right way, but I fear that there are employed teachers who have a bad case of curvature of the spine toward SOCIALISM and they allow no opportunity to go by to impress these students of the plastic age that socialism is the only solution to our present chaotic state. The whole set-up, dating back a decade, has had a tendency toward a Socialistic regime, with the idea of impressing socialistic schemes, good and bad, upon the people at large.

Last, but by no means least, we have the Social Security Act, which may or may not be constitutional; that is not for us to decide.

A statesman is a leader; but a politician always has his ear to the ground attempting to hear the wishes of his constituents, and by granting them, he maintains his own personal popularity. Too often he mistakes the propaganda of some small but noisy group for the demands of the majority of the people. Thus we have to fight the propagandist and the politician. The politician has to keep his fingers on the pulse of the public in order that he may know the desires of the electorate. The propagandist's purpose is to awaken this electorate to real or hypothetical needs for a change. The electorate is influenced by the propagandist by being constantly reminded that they are being unjustly dealt with. The legislature becomes the agency to remedy the situation.

Consequently the politician caters to the misguided decisions of the electorate, and it becomes the joint purpose of the politician and propagandist that it will end forever all the family medical bills, sickness will be cut to a minimum through repeated examinations to determine the lurking of some disease or pathological condition—at no extra cost. The National Debating Societies were given a chance to air the subject. And are they airing it? The magazines are doing their share. New books of fiction and non-fiction are doing their share.

One of the most pitiful things about the whole affair is: these school children, if immature in years and experience, are trying to debate a subject that has been tried by old and experienced economists and almost given up as a bad job. The school children are given such a short time for speaking that they cannot enter into a very comprehensive discussion. My own private opinion of this matter is that from the point of dissemination of information to the general public, it is a flat failure. The grading that is done to determine who wins depends upon technical points that have practically nothing to do with the subject; therefore, the poor youngster is watching his stance, pronunciation, grammatical and rhetorical construction so closely that he gives his subject matter little thought. However, it has stimulated thoughts in other people who have begun to study the matter in earnest and owing to the lack of proper information through the press, may form erroneous conclusions. The information directly disseminated from debating teams may be used as propaganda by politically minded persons by pointing to some of the successful affirmative teams and what they have said. The sinister side is around the corner reeking with corruption and harm and, at the opportune time, something will be pulled out of the fire with this nation-wide debate by some politician or clique and thrown into the teeth of our law-making bodies and they will credit it. In turn it will be forced down the throats of the American medical profession and they will have to swallow it against their good judgment—and, brother, will it be a bitter pill?

It is said somewhere, "It is better to take a half loaf than none at all." So at this late date we must get out of bed and get ready for action before the last curtain falls. We have not heeded the alarm that has been sounding for the last decade. We need to clean up our own back yard and set our house in shape. We need to support our school system to the fullest extent and keep that system free from all contamination by the politician and the propagandist. In the American school system we have those of the plastic age in attendance and should they become influenced by a corrupt propagandist, it is hard to estimate just how far such influence might extend with that individual and those of his associates, and great harm could be done. It seems to me that the public school, which is the place where character is developed and an endeavor is made by the teachers to start young people in the right way, should be supported to the fullest extent, as well as guarded against propaganda and political influence. The remedy may not be as easy as it first seems, because of the lack of public interest in a constructive way. The public school system is usually not praised for the good work that is done; on the other hand, it is severely censored for the least possible thing that may have happened, real or fancied.

You can aid the negative side of this debate by simply attending some of the meetings and contests. You can easily afford to take an evening off and attend the session where some of your patients are in action, trying to uphold you and your profession. It will be time well spent.

The secretary of a county society can help us by sending to the Association office at Indianapolis any clippings from newspapers reporting the results of debates in various parts of the state in order to make a summary of the debates when they close next spring.

At the present time the decisions stand about  $6\frac{1}{2}$  to  $3\frac{1}{2}$  in favor of the Affirmative, or state medicine. These figures may not be absolutely right, but are not far off. Now what does this mean to the public? The answer is simple: we need a change from the present system to that of state medicine.

## RESULTS OF DEBATES

	Negative Team Won	Affirmative Team Won
Elmhurst	2	3
North Side	2	2
Central H. S.	4	3
LaPorte	2	7
Columbia City	2	1
Elkhart	2	4
	—	—
	14	20

February 1st, three high school teams: Negatives won 3 and the Affirmatives also won 3, making a total of:

Negatives	17
Affirmatives	23

The Affirmatives are 6 in the lead.

The judges were:

North Manchester University	2
DePauw University	2
Purdue University	2
	—
	6

What does it mean to the physicians and to those trying to defend our cause? It means that you and I are not supplying these debaters to the best of our ability; first, placing the proper material in their hands; and then by giving them our moral support and advice. The material can be had for the asking from the headquarters office of the Association, and the rest is up to you.

In conclusion, let me say that new and fantastic laws are usually the result of propaganda. This is propaganda, and it is smacking the noblest profession on the cheek. The day of turning the other cheek to be smacked is past, I think, and it is high time to be real he-men, and put up a fight.

## MEDICAL ETHICS

O. O. ALEXANDER, M.D.  
TERRE HAUTE

The Committee on the Secretaries' Conference decided that a few minutes of the time on this program should be given to a talk on medical ethics. Unfortunately they chose the chairman of the council to give the talk. The subject is not one of my choosing, and I fear that this paper which I have so laboriously prepared will reflect my lack of enthusiasm.

The system of morals of the practice of medicine have not and, of course, could not change since the dawn of civilization. I can present no new stream-lined, air-conditioned, 1936 code of ethics and nothing that I can say here today and nothing that we may do here today can in any way influence the medical etiquette of the profession of Indiana.

A system of medical morals cannot be taught to an individual nor can it hardly be acquired by an individual ill adapted to its reception. The problem of ethics, then, is one chiefly of inheritance and early home training. Occasion will be made a little later to refer to this statement; however, in the main it holds true.

It is true that both our state organization and our parent organization, the American Medical Association, have in times past made much of the problem of ethics; in fact, the founders of the American Medical Association in 1847 had in mind chiefly this matter and the first meetings were devoted almost exclusively to the formation of a code. It was also necessary for any state or local county organization, in order to become affiliated with the national group, to have its members individually and collectively subscribe to the Code as first laid down. It is perfectly apparent, however, that an individual with a well developed sense of fairness and honesty will practice medicine, using excellent etiquette in his relations with his fellow practitioners and a high moral code in his dealings with his clientele even though he may never have so much as heard of the Code of Ethics of the American Medical Association as laid down in 1847, or the principles of ethics as laid down by the same organization in 1903 and 1912. On the other hand, an individual without this inherited

sense, even though he had perfectly familiarized himself with these tenets, would in all probability violate them ad lib with both his fellow practitioners and his patrons.

I was informed by the committee that there was a feeling that many of the younger men entering into the practice of medicine in the last few years seem to have little perception of ethics or at least were failing to demonstrate the knowledge, if any, they possessed. This may be true although it would be rather difficult to account for the fact that a group of men graduating and entering the practice in one decade as a whole would have a standard of morals lower than a group as a whole in another decade. If it is true, I could only account for it on a basis of some great natural law having perhaps to do with the war, the post-war neuroticism, the period of inflation, the period of depression, etc. If it is true, these men are to be pitied. They may have a brief span of prosperity but will stand little chance in competition with a younger generation equipped with a higher moral standard entering the field of medicine in the next few years. A man's success, of course, may not be measured in the exact ratio of his ethical standard, but it is a foregone conclusion that a man who does not practice medicine in such a way as to warrant the respect of his competitors and his patrons can at best enjoy only a few short years of success.

I have always been at a loss to understand the feeling that the laity, almost universally, has towards our matter of ethics. No matter how ignorant the layman may be, he seems to know that we do have a code of ethics and almost universally among them, both uneducated and educated, there is a feeling towards it of contempt. There seems to be a general feeling among them that the profession makes a fetish of its code and that a matter of life or death is as nothing in comparison with a breach in the code. Much has been written in the daily press, magazines, and even whole books in reference to this matter and incalculable harm has been done to the profession in this way. Every possible effort should be made by the profession to combat this feeling among the laity.

The advent of workmen's compensation acts in the various states, the formation of so-called clinical groups with the accompanying mass practice in medicine and the encroachment of state medicine has tended towards complete disruption of our code of ethics. As an example, a circumstance such as this is occurring with increasing frequency over the country. A laborer while at work, lifting some object, feels a pain in the inguinal region. That evening he consults his family physician who informs him that he has a hernia and advises operation. He reports the matter the next day to his employer who sends him to a physician whose name has been supplied him by his insurance carrier. The man probably informs the insurance carrier that Dr. so-and-so is his family physician and that he has already consulted him; however, this matter is entirely overlooked by the insurance physician who sends him to the hospital and operates upon him for his hernia. An occurrence of this kind can certainly be construed in no other way than as a gross breach of medical ethics. The doctors employed by the insurance companies may attempt to salve their consciences by claiming that in a case of this kind the insurance company is paying the bill and under the law is entitled to name the surgeon; however, no legislation should affect ordinary courtesy between physicians nor disturb the relationship between the patient and his family physician. As another example: a patient consults her family physician on account of persistent headache; he refers her to an eye specialist who happens to be a member of a clinical group. The specialist in turn refers her to the internist in the group. These things are basically wrong and since they are basically wrong, the cure will probably be automatic. Insurance carriers may eventually find that disaffection of the employees may prove costly, and specialists in clinical groups may begin to realize a loss in referred work with a resultant mending of their methods.

George Bernard Shaw, in his preface to the "Doctor's Dilemma," makes the following statement: "As to the honor and conscience of doctors, they have as much as any other class of men, no more and no less."

At first thought this statement might seem basically true;

however, it would seem more likely that in the first place, young men who select as their life vocation the practice of the healing art in the regular manner would be somewhat above the average. Further, the fact that they must go through a grilling eight years of preparation, during which time the weakest and the weaker are weeded out, it would certainly leave a class of men whose conscience and morals would be above the average. It must be granted, of course, that we have in our profession men of all degrees of morality.

This brings me to comment on the expressions of Mr. Abraham Epstein and Dr. John A. Kingsbury at a recent meeting in New York City of the American Association for Social Security. Many of you have perhaps read this article which appeared in the *New York Times*, Sunday, January 12th, 1936. The article reads as follows:

"Abraham Epstein, veteran secretary of the Association, was bitterly critical of the opposition of 'professional agitation groups' in the medical field to health insurance. His views paralleled those of Dr. John A. Kingsbury, former secretary of the Milbank Memorial Fund, who contended that the medical profession included, in addition to its many generous and high-minded members, 'more crooks, petty people and quacks than any other profession.'

"Mr. Epstein accused medical societies of using the 'unfairest kind of tactics' to block the introduction of insurance legislation.

"These societies," he said, "do not come up so much in the open as did the manufacturers' associations when they were fighting economic security measures. The medical groups bring secret pressure to bear; they use threats and cajolery to frighten legislators out of introducing bills. But while they can intimidate many legislators for a year or two, the crying need for legislation on the subject will force it through in the end."

#### HEALTH CLAUSES NEEDED IN ACT

"Dr. Kingsbury held that health clauses should have been written into the original social security act.

"Health insurance," he said, "seems to have been the Cinderella of the family of social security. It has had to go back to its rags for a while, but I am one of those optimists who believe the prince is going to find her and they will get married soon."

"Some 'misrepresentation' concerning the plans of health insurance proponents were cleared up by Professor Herman A. Gray, chairman of the New York Advisory Council on Unemployment Insurance, who presided.

"We do not want to disturb the relationship between doctor and patient," Dr. Gray insisted. "We do not want to revise fees. We do not want to add expenditures. We simply want to rearrange and budget sums that are now being spent."

"The exclusion of health insurance from the security bill was termed by the chairman as 'indication of the confusion with which this country plunged into the complexities of social security.' He maintained that 'we have more to gain from health insurance than from either of the two items touched by the bill—unemployment insurance and old-age pensions.'"

Our old friends, Mr. Abraham Epstein of the famous or infamous Epstein bill, and Dr. John A. Kingsbury, of Milbank fame, these two gentlemen of the born reformer type in their fanaticism accuse us of using the unfairest kind of tactics to block the introduction of their pet legislation and we are petty crooks and thieves, because we mildly resent our neighbor taking over our business and instructing us in its conduct.

It makes one wonder just what personal code of ethics, if any, these men pretend to observe.

To refer now, in closing, to the fact mentioned at the beginning of this paper, as to the problem of ethics being one chiefly of inheritance and early home training, it is still felt that perhaps this subject has been too grossly neglected in the curriculum of our medical schools in the past few years. It is felt that more time should be devoted to this subject beginning during a probably more impressionable year, that is the junior year, and the council of the Association at its last meeting in January of this year so recommended.

#### COUNTY SOCIETY REPORTS

ALLEN COUNTY (FORT WAYNE) MEDICAL SOCIETY met at the Chamber of Commerce, Fort Wayne, January twenty-eighth. This was a special meeting, requested by the Fort Wayne Hospital Council, to hear C. Rufus Rorem talk on "Group Hospitalization." Attendance numbered thirty-six.

At the January twenty-first meeting, at St. Joseph's Hospital, the program consisted of presentation of clinical cases by members of the hospital staff. Attendance numbered forty-five.

Dr. J. J. Callahan, of the Cook County Hospital, Chicago, was the principal speaker at the February fourth meeting. His subject was "Fractures of the Elbow, Knee and Hip-joints." Attendance numbered twenty-one.

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BENTON COUNTY MEDICAL SOCIETY officers for 1936 are:

President, V. L. Turley, Fowler.

Secretary, C. W. Atkinson, Boswell.

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BOONE COUNTY MEDICAL SOCIETY members met at the Ulen Country Club, Lebanon, February fourth, to discuss plans for an addition to the Witham Memorial Hospital. This was a business meeting only. Attendance numbered eight.

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CASS COUNTY MEDICAL SOCIETY members heard Dr. J. C. Vaughan of Marion tell of his experiences as a physician in the arctic and antarctic regions, January twenty-third, at Logansport. Attendance numbered thirty-nine.

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CLINTON COUNTY MEDICAL SOCIETY met at Frankfort, February sixth, to hear Dr. J. F. Richter of Boston discuss diseases of the heart.

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DAVIESS-MARTIN COUNTY MEDICAL SOCIETY members met at Washington, February third, for a farewell party for Dr. R. L. Kleindorfer, who has moved to Evansville.

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DEARBORN-OHIO MEDICAL SOCIETY members met at The Chatterbox in Lawrenceburg, January thirtieth, for a dinner meeting and round-table discussion.

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DE KALB COUNTY MEDICAL SOCIETY met at Auburn, January ninth, for a called business meeting. Nineteen attended.

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DELaware-BLACKFORD COUNTY MEDICAL SOCIETY met at Muncie, in the Hotel Robert, January twenty-first, for a dinner meeting. Mr. L. B. McCracken of Indianapolis explained the plan of the Indianapolis Medical and Dental Business Bureau. A committee was appointed to study the plan and to make recommendations concerning its applicability in Muncie.

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ELKHART COUNTY MEDICAL SOCIETY met in Elkhart, February sixth, with Dr. George H. Gardner of Chicago as principal speaker. His subject was "Advances in Gynecology."

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FAYETTE-FRANKLIN COUNTY MEDICAL SOCIETY met at the McFarlan Hotel, Connersville, February eleventh. Dr. John Griest of Indianapolis read a paper on "Examination of the Mental Patient."

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FLOYD COUNTY MEDICAL SOCIETY met at New Albany, February fourteenth, for a dinner meeting. Dr. Fred Bierly of Elizabeth was the principal speaker. His subject was "Observations of High and Low Blood Pressure."

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GIBSON COUNTY MEDICAL SOCIETY members held a dinner meeting in the Emerson Hotel, Princeton, January thirteenth. Dr. John H. Hare of Evansville talked on "The Common Types of Insanity and Their Diagnosis." Attendance numbered twenty.

GRANT COUNTY MEDICAL SOCIETY officers for 1936 are:

President: E. F. Jones, Marion;  
Vice-President: H. A. Miller, Marion;  
Secretary-Treasurer: H. E. List, Marion.

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GREENE COUNTY MEDICAL SOCIETY met January twenty-third in Linton. Dr. Ben Raney of Linton presented a paper on "Splenomegalyogenous Leukemia."

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HAMILTON COUNTY MEDICAL SOCIETY met at Noblesville, January fourteenth, for a round-table discussion. Twenty-one members attended the meeting.

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HENDRICKS COUNTY MEDICAL SOCIETY members met at Danville, January twenty-eighth. Case reports were presented by Drs. C. B. Thomas, J. C. Stafford, and M. E. Frantz.

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HENRY COUNTY MEDICAL SOCIETY members at their December twelfth meeting elected the following officers:

President, W. U. Kennedy, New Castle.  
Vice-President, W. S. Robertson, Spiceland.  
Secretary-Treasurer, George Wiggins, New Castle.

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HENRY COUNTY MEDICAL SOCIETY members met at the residence of Dr. W. U. Kennedy, New Castle, February thirteenth, with Dr. R. L. Sensenich of South Bend as principal speaker. Attendance numbered twelve.

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INDIANAPOLIS MEDICAL SOCIETY met at the Athenaeum, January twenty-eighth. The effects of the use of alcohol, morphine and tobacco were discussed by Drs. Murray DeArmond, Paul G. Iske and William M. Dugan. The papers were discussed by Drs. Rogers Smith and R. N. Harger.

On February fourth, at the Athenaeum, members of the Indianapolis Medical Society heard a symposium on "Water Metabolism" presented by Dr. R. A. Solomon, who discussed "Normal Water Balance, Dehydration, and Water Intoxication" and Dr. C. L. Rudesill who talked on "The Mechanisms of Tissue Edema Formation and Their Treatment." Discussants were Drs. George S. Bond and Lyman Meiks. A ten-minute talk on "Trained Personnel in Public Service" was presented by Miss Evelyn Chambers of the Indianapolis League of Women Voters.

The February eleventh meeting of the Indianapolis Medical Society was a joint meeting with the Staff Society of the Indianapolis City Hospital, and was held in the auditorium of the City Hospital. The program included demonstration of the new respirator; management of emergency poison cases; and presentation of clinical cases of interest.

A special meeting of the Indianapolis Medical Society was held at the Athenaeum, February eighteenth, for memorial services for Dr. Hugo O. Pantzer, former president of the society.

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JASPER-NEWTON COUNTY MEDICAL SOCIETY met at Kentland, January thirty-first, with Dr. O. E. Glick as host. Dr. Thurman B. Rice of Indianapolis discussed "Health Fads." The public was invited to hear Dr. Rice's address.

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JOHNSON COUNTY MEDICAL SOCIETY members met at the Hillview Country Club, Franklin, January twenty-seventh, for a dinner meeting. Officers were elected as follows:

President, Dr. Oran Province, Franklin.  
Vice-president, Dr. Porter Myers, Edinburg.  
Secretary-treasurer, Dr. W. L. Porteus, Franklin.

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KNOX COUNTY MEDICAL SOCIETY met at the Jewel Cafe in Vincennes, January twenty-first, with Dr. W. W. Hewins of Evansville as principal speaker. Dr. Hewins' subject was "Prostatic Disease and Transurethral Prostatectomy." Attendance numbered twenty-five.

At the regular monthly meeting, held February eleventh, Dr. R. Cochran presented a case report, and Dr. Harold Lynch of Evansville talked on "Immunization of Children Against Diphtheria and Scarlet Fever."

KOSCIUSKO COUNTY MEDICAL SOCIETY members met at the Hotel Hays, Warsaw, January fourteenth, to hear Dr. J. R. Baum of Warsaw talk on "Carbohydrate Metabolism." Thirteen members were present.

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LAKE COUNTY MEDICAL SOCIETY members heard Dr. B. R. Kirklin of The Mayo Clinic, February thirteenth.

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LA PORTE COUNTY MEDICAL SOCIETY members held a meeting in LaPorte, January sixteenth, to which the public was invited. Dr. R. L. Sensenich of South Bend talked on "Social Aspects of Sickness."

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MADISON COUNTY MEDICAL SOCIETY met at St. John's Hospital in Anderson, January twentieth. Papers were presented by Drs. H. W. Gante, J. R. Tracy, J. C. Drake and Robert Armington, all of Anderson. Attendance numbered thirty.

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MIAMI COUNTY MEDICAL SOCIETY met at Peru, January thirty-first, with Dr. J. B. Shoemaker of Miami as principal speaker. His subject was "Protein Therapy." Attendance numbered eighteen.

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MONTGOMERY COUNTY MEDICAL SOCIETY members met at the Culver Hospital, Crawfordsville, January thirtieth, with Dr. Lincoln Seed of Chicago as principal speaker. His subject was "Hyperthyroidism."

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MORGAN COUNTY MEDICAL SOCIETY elected officers at the January fifteenth meeting as follows:

President, W. J. Stangle, Mooresville.  
Vice-president, Charles Aker, Mooresville.  
Secretary-treasurer, George L. Sandy, Martinsville.

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MUNCIE ACADEMY OF MEDICINE members met at the Hotel Roberts, February fourth. Dr. Eugene B. Mumford of Indianapolis talked on "Problems of the General Practitioner."

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NORTHEASTERN INDIANA ACADEMY OF MEDICINE met at the Kendall Hotel, Kendallville, January thirtieth, to hear Dr. H. F. Beckman, of Indianapolis, talk on "Toxemia of Late Pregnancy."

\* \* \*

PORTER COUNTY MEDICAL SOCIETY met at Valparaiso, December thirtieth, for election of officers. The society also voted to purchase a moving picture projector to be used for educational purposes. Officers elected are:

President: S. E. Kittner, Kouts;  
Vice-President: J. W. Dale, Chesterton;  
Secretary-Treasurer: P. M. Corboy, Valparaiso.

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PUTNAM COUNTY MEDICAL SOCIETY members met at the Putnam County Hospital, January fourteenth. Dr. G. W. Gustafson of Indianapolis talked on "Toxemias of Pregnancy." Twelve members were present.

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RANDOLPH COUNTY MEDICAL SOCIETY met at Winchester, January thirteenth, to hear Dr. Fred McK. Ruby of Union City present his president's address entitled "Reminiscences."

On February tenth, Dr. R. B. Engle spoke on "Obstetrics" before the Randolph County Medical Society at Winchester.

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ST. JOSEPH COUNTY MEDICAL SOCIETY met January twenty-first in South Bend. Dr. Marcus W. Lyon, Jr., discussed "The Hereditary Factor." Attendance numbered thirty-three.

On January twenty-eighth, the St. Joseph County Medical Society met at the Jefferson Plaza, South Bend, with Drs. J. A. Abel and H. S. Cooper as speakers. Subjects presented were "The Common Cold" and "Pneumonia." Attendance numbered forty.

ST. JOSEPH COUNTY MEDICAL SOCIETY has reduced (by an amendment to the by-laws) the number of meetings of the society—future meetings to be held on the second and fourth Tuesday of each month from September to May, inclusive. Dinner meetings will be held in addition to these regular meetings, when and where the Program Committee may decide.

Dr. E. S. Rigley, Sherland Building, South Bend, is a new member who was received by transfer from the Douglas County, Omaha, Nebraska, Medical Society.

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SULLIVAN COUNTY MEDICAL SOCIETY members held a meeting February fourteenth, at Sullivan, in honor of Dr. Walter Nixon Thompson who has practiced there for fifty years. Dr. Thompson was presented with a portrait, and with a watch as an expression of the esteem in which he is held by the members of the Sullivan County Medical Society. A more complete report of this meeting is given elsewhere in this magazine.

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TIPPECANOE COUNTY MEDICAL SOCIETY members met at the State Soldiers' Home in Lafayette, January fourteenth, to hear Mr. L. B. McCracken of Indianapolis and O. W. Stair of Lafayette discuss "The Medical and Dental Business Bureau." Attendance numbered forty-five, including three dentists.

Dr. Robert M. Moore of Indianapolis presented a paper on "Diseases of the Coronary Arteries," at the February eleventh meeting of the Tippecanoe County Medical Society.

\* \* \*

TRI-COUNTY MEDICAL SOCIETY (SHELBY, HANCOCK, and RUSH COUNTIES) held a banquet meeting at Rushville, February eleventh. Speakers were Dr. L. F. Hulsmann of Rushville, Dr. Herbert Inlow of Shelbyville and Dr. W. C. McFadden of Shelbyville.

The next meeting of the Tri-County Society will be held March seventeenth at Greenfield.

\* \* \*

VANDERBURGH COUNTY MEDICAL SOCIETY members met at the Central Library, Evansville, January fourteenth. Miss McCullough discussed "Facilities of the Medical Library." Case reports were presented by Drs. H. T. Combs and A. F. Clements. Attendance numbered thirty.

\* \* \*

VIGO COUNTY MEDICAL SOCIETY held its annual banquet and meeting January fourteenth in Terre Haute. At the same time, the Vigo County Medical Society Auxiliary held its annual dinner meeting.

\* \* \*

WHITLEY COUNTY MEDICAL SOCIETY met at Columbia City, January fourteenth. Dr. L. W. Elston of Fort Wayne presented a paper on "Abdominal Pain."

#### WAYNE-UNION COUNTY MEDICAL SOCIETY

##### IN MEMORIAM

MELVILLE FREEMAN JOHNSTON  
August 10, 1858      December 29, 1935

Death coming suddenly to Dr. M. F. Johnston on December 29, 1935, while on the way to visit a sick child, was probably as he, himself, would have wished and it was characteristic of his long years of unselfish service that he did not regard the cold or the snow drifts as excuses for refusing to make a professional call.

Dr. Johnston was an example of the highest type of general practitioner of medicine and if the standard of professional skill and personal integrity which he set were more generally attained, it is probable that many of our present problems in regard to socialized medicine would not exist.

In addition to his private practice, he found the time and possessed the ability to serve with unusual efficiency as both city and county health officer, as a valued member of the staff of the Reid Memorial Hospital and as surgeon for the C. and

O. Railway. Especially commendable was his service for twenty-seven years as physician to the Margaret Smith Home for Aged Women.

He was a whole-hearted believer in organized medicine and few members of this society have so regularly attended the local, state and national meetings.

Of him we may truly say that in its widest and fullest implications he was a good doctor.

With such a full professional life, it is surprising that he had time and interest for active participation in many civic affairs, perhaps the most important of which was as a member of the Board of School Trustees of Richmond for seventeen years.

He was to an outstanding degree a good citizen.

But we, his colleagues, shall miss most his genial greeting, his wise counsel and his loyal support for he was indeed a good friend.

And so as doctor, citizen and friend, we mourn his passing and extend our sincere sympathy to his family.

Finally, Mr. President, your committee moves that this memorial be made a part of the minutes of this society, that copies of it be sent to Dr. Johnston's family, to the local press and to THE JOURNAL of the Indiana State Medical Association.

#### SULLIVAN COUNTY MEDICAL SOCIETY

Sullivan County Medical Society members honored Dr. Walter Nixon Thompson of Sullivan upon the occasion of the completion of half a century of practice in the profession of medicine, February fourteenth.

Approximately one hundred members of the society, their wives, and guests attended the dinner party which was held at the Methodist Church annex in Sullivan.

Dr. J. R. Crowder presented Dr. Thompson with a portrait, and with a beautiful watch, as an expression of the esteem in which he is held by members of the Sullivan County Medical Society.

Dr. J. H. Crowder of Sullivan gave an address of welcome, and Dr. J. T. Oliphant of Farmersburg served as master of ceremonies.

Dr. J. B. Maple of Sullivan gave the "Story of a Doctor's Life," in which he sketched briefly the life of Dr. Thompson. This address was published in the Sullivan *Daily Times*, February 15, 1936. Dr. Maple called attention to the fact that of the more than 350 physicians who have practiced in Sullivan County since its beginning in 1816, only twelve have completed fifty years of active service in the medical profession. Six have attained fifty years or more of service in Sullivan County, and of these the first was Dr. John J. Thompson, the father of the honor guest. There has been, through the service of the father and the son, a Dr. Thompson in practice in Sullivan continuously since 1848. Dr. Maple said that Dr. Walter N. Thompson has been in continuous practice in Sullivan longer than any one else now living, and is the dean of the medical profession in Sullivan County.

Speakers who paid tribute to Dr. Thompson included Dr. A. F. Weyerbacher of Indianapolis; Dr. W. D. Gatch of Indianapolis; Mr. Thomas A. Hendricks of Indianapolis, who read a message from Dr. E. D. Clark; Dr. W. D. Asbury of Terre Haute brought a message from the Aesculapian Society of which Dr. Thompson is one of the oldest members living; Dr. C. N. Combs of Terre Haute; Dr. Marion Bedwell of Sullivan read a number of messages and telegrams received from persons who were unable to attend.

#### INDIANA STATE MEDICAL ASSOCIATION BUREAU OF PUBLICITY

January 3, 1936.

Meeting called to order at 3:30 p. m.

Present: William N. Wishard, M.D., chairman; E. D. Clark, M.D.; F. M. Gastineau, M.D., and T. A. Hendricks, executive secretary. Invited guest, Gordon Batman, M.D., chairman, Public Relations Committee, Indianapolis Medical Society.

The release, "Hints to the Foundations," approved for publication in Monday morning papers, January 13.

The Bureau suggested that a release upon "The Common Cold" be prepared for the next meeting of the Bureau.

Report on medical meeting:

Dec. 7—Lawrence High School, Lawrence, Ind. "The Pre-School Child." 100 present.

Requests for speakers:

Jan. 14—Fayette-Franklin County Medical Society, Connersville, Ind. Speaker obtained.

Feb. 14—Sullivan County Medical Society, Sullivan, Ind. Speaker obtained.

A letter was received from the assistant director of the State Division of Public Health in answer to a request by the Bureau for statistics concerning the economic cost of disease in Indiana.

A group portrait of medical leaders which was used as an advertisement by a drug firm brought to the attention of the Bureau. The Bureau thought that this picture was of such value that it should be framed and hung on the walls of the headquarters office. The secretary was instructed to write the drug firm to see if this picture might be used with the name of the firm and the advertising copy eliminated.

A local theatre manager called the attention of the Bureau to a moving picture which he felt presented the medical profession in a bad light. The Bureau was requested to send a representative to see a preview of this picture. The Bureau appreciated the foresight of the manager in calling this to the attention of the Bureau and delegated two representatives to attend this preview provided that in no way was any publicity to be given directly or indirectly which would indicate that the medical profession approved or disapproved the moving picture.

The Bureau requested a budget of \$500 for 1936.

January 11, 1936.

Meeting called to order at 3:30 p. m.

Present: E. D. Clark, M.D.; F. M. Gastineau, M.D., and T. A. Hendricks, executive secretary.

The release, "Colds, Clothing, and Climate," approved for publication in Monday papers, January 20.

Letter received from a physician whose name was used in connection with the promotion of a health community in the northern part of the state. A copy of this letter was to be forwarded to the secretary of the American Medical Association.

The representatives of the Bureau of Publicity who attended the preview of the moving picture, the setting of which is in a hospital and many of the characters are physicians, made a report to the Bureau. They felt that, although the picture is highly overdrawn, there is nothing in it which is derogatory to the medical profession.

Letter received from a layman for information in regard to bladder trouble. The Bureau suggested that this layman be referred to his family physician, and that a copy of the letter be sent to the director of the Bureau of Health and Public Instruction of the American Medical Association, asking that literature on the subject be sent to the layman making the request.

Letter received from the president of a county medical society asking for some helpful hints for the conduct of his office. The writer states, "This society is aiming at closer union and cooperation among ourselves and with the State and National organizations. We have many pressing local problems that call for concerted action and I want to do all in my power to work along the proper lines." Answer to this letter was approved by the Bureau.

Letter received from newspaper in Indiana concerning a complimentary issue that is to be printed in regard to a new local hospital. The Bureau of Publicity felt that such an issue is entirely up to the desires of the local county medical society.

Annual report of the United States Surgeon General received by the Bureau of Publicity. This was given to a member of the Bureau to review and report back at the next meeting of the Bureau.

January 28, 1936.

Meeting called to order at 3:30 p. m.

Present: W. N. Wishard, M.D., chairman; F. M. Gastineau, M.D.; E. Vernon Hahn, M.D., and T. A. Hendricks, executive secretary. Invited guest: C. L. Rudesill, M.D., member of Public Relations Committee, Indianapolis Medical Society.

The release, "Health and Unemployment," given to one member of the Bureau to review before publication.

*Requests for Speakers*

February 3—Kiwanis Club, Frankfort, Indiana. Speaker obtained to talk on "Some Child Health Problems."

February 19—Parke-Vermillion Medical Society, Clinton, Indiana. This is to be a joint meeting of physicians and dentists. Correspondence with secretary of the society reviewed by Bureau. No speaker selected as yet.

Letter received from the secretary of the Jasper-Newton County Medical Society asking that the following papers of that county be placed upon the mailing list to receive the Bureau releases: Kentland Democrat, Kentland, Indiana, and Morocco Courier, Morocco, Indiana.

The secretary of the Bureau was instructed to formulate a letter to be written to county society secretaries stating that it is most desirable for each county society to appoint a committee to interview the editors of their local newspapers and talk to the editors concerning the newspaper releases.

Communication received from the Executive Committee of the Medical Society of the State of New York, which reads as follows:

"WHEREAS, the Committee on Medical Trends finds that the point of view of organized medicine cannot be effectively presented through the lay press without direct quotation of individual physicians, it is hereby

"RESOLVED, That it is the sense of the Executive Committee that such rules or customs discouraging personal publicity as may seem to contravene the direct quotation of physicians be relaxed to the extent that requests of the Committee on Medical Trends for such statements from physicians be freely granted to the end that avenues of publicity may not be closed by such prohibitions as may have heretofore existed. It is particularly desirable for officers of state, district, or county medical societies, as well as chairmen of committees and subcommittees to be quoted, and in the event they are not available, members of such committees and subcommittees, on matters which pertain to the work of the society."

The Bureau of Publicity is absolutely opposed to such a resolution and it feels that it is definitely contrary to the basic principles of medical ethics. A statement concerning this is to be prepared by the Bureau with a recommendation that it be submitted to the editor of THE JOURNAL for publication.

The following report was made by a member of the Bureau upon the United States Public Health Service Surgeon General's annual report to Congress:

"Following is a resume of the Surgeon General's report to Congress:

"Health conditions in general remained good during the year ending June 30, 1935. The death rates for typhoid and diphtheria in 1934 were both 3.3 per 100,000 population. In 1900 the death rate for typhoid fever was 35.9 per 100,000 and the diphtheria rate was 33.3 per 100,000. In other words, preventive medicines saved 91,000 lives in the year 1934 in these two diseases. During the year 1934, 254,551 cases of syphilis and 161,810 cases of gonorrhea were reported. These, however, are not true figures. Special surveys indicate that there are 518,000 new cases of syphilis and 1,555,000 new cases of gonorrhea each year.

"Public Health Service inspected 2,636 planes with 30,249 persons at ports of entry.

"Further work has been done in the prevention of bichloride of mercury poisoning by the use of formaldehyde sulfoxylate as an antidote. Out of thirty patients treated in Washington, D. C., twenty-seven survived.

"The Federal Narcotic Farm opened at Lexington, Kentucky, on May 29, 1935."

It was suggested that a release be prepared from this report. Letter received from a physician of Indiana concerning puh-

lication in a special edition of a local paper of an article featuring his new private hospital. The Bureau suggested that the secretary prepare an answer to this physician, stating that the Bureau cannot approve any copy without seeing such copy and stating that no matter what is contemplated, it should receive the official approval of the local county medical society.

Letter received from a pharmaceutical concern giving the Bureau permission to frame one of its advertisements omitting the name of the pharmaceutical house. The picture in question may be suitable for hanging in the headquarters office.

Letter received from the secretary of the *American Medical Association* in regard to a pamphlet concerning a health community project in the northern part of the state.

Notes taken by Dr. Robert Cravens while attending medical school at Philadelphia in 1817 and 1818 brought to the attention of the Bureau. The Bureau feels that this material is of vast historical value and has asked one of its members to prepare an article concerning it for publication in THE JOURNAL.

January 21, 1936.

Present: W. N. Wishard, M.D., chairman; F. M. Gastineau, M.D.; E. Vernon Hahn, M.D., and T. A. Hendricks, executive secretary. Invited guest: H. S. Leonard, M.D., member of Public Relations Committee, Indianapolis Medical Society.

The release, "Medical Economic Conference," approved for publication in Wednesday papers, January 29.

#### Requests for Speakers

January 22—Rotary Club, Franklin, Indiana. Speaker obtained to talk on "State Medicine."

February 3—Woman's Auxiliary to the Vigo County Medical Society. Speaker to be obtained to talk on "Contagious Diseases."

February 19—Parke-Vermillion Medical Society, Clinton, Indiana. Joint meeting of physicians and dentists. Speaker to be obtained.

Letter received by the Bureau suggesting that a physician of Sullivan County be appointed upon the medical pioneer memorial committee that is to act in conjunction with the Bureau of Publicity. The duty of this committee will be to see that proper memorial tributes are paid to such medical pioneers as Mrs. Jane Todd Crawford, Dr. Jonathan Richmond, Dr. John Stowe Bobbs, and Mrs. Mary E. Burnsworth.

Letters were received from the secretaries of several county medical societies asking for instructions as to what the secretaries should do with the copies of the weekly releases which are sent to them. Each county medical society should appoint a committee to call upon the editors of the various papers in their county and urge editors and newspapers to carry the releases which are issued each week. Copies of these releases are sent to 192 daily and weekly papers in Indiana. Papers which are not upon the mailing list will be placed there upon the request of county society secretaries.

### SECOND ANNUAL STATISTICAL REPORT THE INDIANAPOLIS MATERNAL HEALTH CLINIC

(December 20, 1934, to December 19, 1935—52 weekly sessions)

#### GENERAL AND MEDICAL DATA

1. Number of patients seeking advice	501 (562)*
a. White	392 (368)
b. Colored	109 (194)
Ratio of white to colored, grossly	4 to 1 (2 to 1)
2. Number of patients referred by physicians	57 11% (8%)
3. Number of physicians referring patients	29 (8)
4. Number of patients referred by social agencies	444 87% (92%)
a. Public Health Nursing Assn.	374 84% (87%)
b. Family Welfare Society	47 11% (9%)
c. Flanner House	3
d. Juvenile Court	1

c. City Hospital	10
f. Coleman Hospital	5
g. County Nurse	1
h. Transient Bureau	3
5. Number of patients given advice	490 (540)
a. Medical reasons	68 14% (16%)
b. Social reasons	12 3% (11%)
c. Economical reasons	410 83% (73%)
6. Number of patients not given advice	11 (22)
Reasons—a. Physical	11 (20)
7. Number of patients given advice	
but did not use	14
Reasons—a. Disinterested	12
b. Pregnant on application	2
8. Number of patients who have returned	
for check-up	301 61% (73%)
a. White	214
b. Colored	87
9. Number of patients who have returned	
for supplies	531 52% (24%)
(540) plus 490 equals 1,030—first and second year patients.	
a. White	395
b. Colored	136
10. Total amount of money paid clinic by patients	\$277.66 (\$195.54)
(\$195.54) plus \$277.66 equals \$473.20	
1,030 patients. Average	.46 (\$0.36)
(Gross cost per patient—501—\$2.53)	
11. Number of patients referred to other clinics	10 (38)
12. Reported pregnancies occurring among	
1,030 patients	42 (13)
a. White	28 (7)
b. Colored	14 (6)
Method at fault	8 19%
13. Total number of living children reported by 501 patients	1,978
14. Average number of living children per patient	3.9
15. Total number of dead children reported by 501 patients	312
16. Total number of abortions reported by 501 patients	333
a. Unintentional (spontaneous, 193; accidental, 62)	245
b. Intentional (induced, 83; therapeutic, 5)	88
17. Per cent of intentional abortions of all abortions	26.4%
18. Total infant and fetal loss reported by 501 patients	645
(24.6% of total conceptions, 2,623)	
19. Per cent of conceptions reported living by 501 patients	75.4%

#### ECONOMICAL DATA

1. Total number of patients whose families lived on private employment income	39% (45%)	194
2. Average weekly income of these 194 families	\$12.72	
3. Total number of patients whose families lived on public relief employment	33% (34%)	163
4. Weekly income of these 163 families	\$5.00 to \$15.00	
5. Total number whose families had no employment	29% (21%)	144
6. Total number of patients whose families were helped by charity	23% (23%)	114
a. Trustees	86	
b. Family Welfare	28	
7. Total number of these patients whose families were on full charity	15% (16%)	73

#### EDUCATIONAL DATA

1. One month schooling	1
2. Less than sixth grade	34 7%
3. Less than eighth grade	117 23%
4. Completed only eighth grade	199 40%
5. Three years or less of high school	115 23%
6. Completed only high school	51 10%
7. One year college	4
8. Two years college	2
9. College graduates	0

## PREGNANCY RECORD OF TWENTY-FOUR EXCEPTIONAL CASES

Case No.	Age	Living Children	Dead Children	Induced Abortion	Spontaneous Abortion	Accidental Abortion	Therapeutic Abortion	Total No. Pregnancies
*580	39	7	3	2	0	3	0	15
697	40	5	1	0	5	0	0	11
690	31	4	2	3	0	0	0	9
701	35	3	1	0	5	0	0	9
*711	32	6	1	5	0	0	0	12
730	39	10	0	0	1	0	0	11
787	33	8	2	0	0	0	0	10
*805	41	13	1	0	0	0	0	14
*809	22	3	1	0	6	0	0	10
834	37	7	1	0	3	0	0	11
*847	39	7	3	0	1	0	2	13
848	32	6	1	4	0	0	0	11
854	41	9	1	0	2	0	0	12
870	42	7	2	0	2	0	0	11
890	27	3	0	5	0	0	0	8
906	33	6	1	0	2	0	0	9
*926	28	2	4	0	7	0	0	13
960	40	8	2	0	1	0	0	11
963	32	9	0	0	0	0	0	9
969	38	6	2	0	0	2	0	10
1023	30	4	0	4	0	0	0	8
*1034	33	9	1	1	1	1	0	13
*1049	26	3	0	5	3	0	0	11
†1051	34	5	0	16 self 0	0	0	0	21
								—
Total av.	34	150	30	45	39	6	2	272

† (Married at 14. Husband unemployed. Second child feeble minded, institutionalized.)

Per cent of conceptions living, 55.5%; per cent lost 44.5%  
 Average number of living children per patient 6.2  
 Conceptions intentionally interrupted 47  
 Conceptions unintentionally interrupted 45  
 Per cent of intentional abortions of all abortions 51%  
 Average number of abortions per patient 4

a. Intentional 2  
 b. Unintentional 2

Average number of conceptions per patient 11.3  
 Source of family support  
 a. Private employment 10 42%  
 b. Public relief employment 8 33%  
 c. Township trustees 6 25%  
 Families dependent on public help 14 58%

\* Figures in parenthesis refer to similar data in last year's report.

## SPECIFICATIONS PRINTED ON APPLICATION BLANK

I consider this patient (indigent) (semi-indigent) and otherwise eligible for advice so far as is expressed by the required stipulations of the clinic, which are as follows:

1. No advice will be given to an unmarried woman, or to a married woman who is not living with her husband.

2. No advice will be given to a woman who does not already have at least two living children, unless the physician in charge discovers sufficient medical reasons.

3. Advice will be given to any married woman (providing she is living with her husband), when in the judgment of the clinic physician she presents bona fide medical reasons.

4. No advice will be given any patient who is financially able to pay a private physician for such service.

5. No patient will be given advice except when referred by a licensed physician or a recognized social agency, a signed statement of recommendation accompanying the patient."

## HOSPITALS AND PHYSICIANS ELIGIBLE FOR LOANS UNDER FEDERAL HOUSING ADMINISTRATION

Hospitals and similar institutions, whether owned and operated by individuals or corporations, are eligible for loans for modernization, repair and equipment under the Modernization Credit Plan of the Federal Housing Administration.

Physicians and surgeons who maintain their offices in buildings removed from their homes, as well as those who have their offices in dwellings, may also take advantage of the plan to have the most modern establishment and equipment.

The distinction is that the hospital, diagnostic center, or the office of the physician when it is not located in a dwelling may obtain credit anywhere from a few hundred dollars to as much as \$50,000, while the physician is limited to a loan of \$2,000 when his office is a part of a home.

The office in a business building, where frequently a number of physicians have their individual consultation rooms but use a common diagnostic center and equipment, would be eligible for credit on the same basis as a hospital. The office in a home, however, would be limited to the \$2,000 maximum for modernization and repair as provided for homes.

This means briefly that any reputable institution or physician may obtain on easy terms sufficient credit to put the structure in good condition and to purchase and install the most modern equipment for diagnosis and treatment.

The Federal Housing Administration lends no money. The loans are made by private banking and financial institutions under an arrangement by which the Housing Administration insures them against loss.

Under these conditions, lending institutions are more than willing to make loans that are sound business risks.

The terms are that the charge may not be in excess of the equivalent of a \$5 discount for each \$100 face value of a one-year monthly instalment note. Payments are to be divided into equal monthly instalments and may be spread over a period of as long as five years.

Equipment that would be considered eligible for an insured credit is described in the regulations as follows:

"It must be of permanent, utilitarian character and of such value as to justify the application of the principle of time payment thereto. It may not include furnishings, furniture, or small portable appliances. A hospital, for instance, could obtain an eligible loan covering X-ray machine, thermal cabinets, fluoroscopes and articles of like character, but such a loan could not include surgical instruments, beds and other furniture."

This should give an understanding of the types of equipment that may be installed. The list is an elaborate one. The main consideration is that the article should have a unit value sufficient to justify the application of time payments to its purchase and should be of a durable nature with a reasonable expectancy of useful life longer than the period of the loan.

The dealer in all such equipment is in all probability familiar with the eligibility rulings of the administrator and whether the article he sells comes within the regulations adopted. If he cannot supply the information, the Federal Housing Administration, Washington, D. C., will make rulings on request.

In the same manner in which equipment has outgrown its usefulness, the building itself may be in need of repairs and modernization. One of the greatest essentials in a hospital is proper light. Lighting installations are eligible.

The operating room may be completely done over, the walls redone, a modern heating plant installed and ventilating or air conditioning equipment put in. The structure may be in need of a new roof, floors, glass-enclosed porches, concrete driveways, fireproofing (most important in an institution of this kind), a built-in garage, or a separate garage. It may be advisable to make some additions. In short, any structural improvements that may be done to the ordinary business establishment would be eligible for the hospital.

Since funds are advanced by banks or other private lending agencies, they are expected to exercise ordinary business precaution. Naturally a lending institution could not be expected to make a large loan to some institution when the credit rating did not justify it.

The banks are required to satisfy themselves on the question of security and the ability to repay.

Assuming these conditions to be satisfactory, there should not be the slightest difficulty in obtaining credit promptly.

Here is an illustration from Hartford, Conn.: Miss Anna M. Holmquist, owner of a convalescent home, obtained a modernization credit of \$1,500 and transformed the institution into an up-to-date maternity hospital. The loan was made available within five days from the date of application. This enabled the owner to put on a new roof, new porch, copper drains and new heating system, and to modernize the interior and the operating room.

It is amazing how much may be done with a comparatively small sum, particularly in the modernization of the building and the purchase of equipment. It would be well for the physician who maintains his own hospital, clinic or diagnostic center, or the group of physicians or corporations to make a survey of their needs and either consult their banker or the Federal Housing Administration.

—From The Journal of the A. M. A., Vol. 105, No. 25, Dec. 21, 1935, p. 2081.

## BOOK REVIEWS

RECEIVED:

**FOR AND AGAINST DOCTORS.** An Anthology compiled by Robert Hutchison and G. M. Wauchope. 168 pages. Cloth. Price \$2.00. William Wood and Company, Baltimore, 1935.

\* \* \*

**REVIEWED:**

## SPECIAL PROCEDURES IN DIAGNOSIS AND TREATMENT.

**THE PROBLEMS IN DIAGNOSIS AND TREATMENT.**  
An Outline for Their Understanding and Performance. By  
Don Carlos Hines, M. D., Clinical Instructor in Medicine,  
Stanford University. 66 pages. Paper. Price \$1.00. Stan-  
ford University Press, Stanford University, California.

This little handbook from the Stanford University Press is a most convenient and informative little volume, written by Dr. Hines. As the author states, it is an outline of the course of lectures given senior students in Stanford, the various procedures recommended being those employed in the medical wards of Stanford University Hospital. The booklet comes in the new spiral binding, making it very convenient to handle. The table of contents is so arranged as to make its subject matter easily available.

A reading of the book convinces one that the subject matter is thoroughly modern; comprehensive in character, material is tersely phrased to make quick reading possible. While the book seems to have been prepared chiefly for senior medical students and internes, we confidently recommend it to all those wishing a ready reference on the subject.

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## MEDICAL TREATMENT OF GALL BLADDER DISEASE.

THE TREATMENT OF CHLORIDE DIARRHEA  
By Martin E. Rehfuss, M.D., Clinical Professor of Medicine  
at Jefferson Medical College, Philadelphia; and Guy M.  
Nelson, M.D., instructor of Medicine at Jefferson Medical  
College, Philadelphia. 465 pages with 113 illustrations.  
Cloth. Price \$5.50. W. B. Saunders Company, Philadelphia  
and London, 1935.

Dr. Martin Rehfuss, a noted authority on gastro-intestinal diseases, and Dr. Guy M. Nelson, who has appeared as a co-author with Dr. Rehfuss in many articles, have collaborated in the preparation of this new volume which proposes to present the medical aspect of the problem of gallbladder disease. This subject has needed a thorough investigation since there are very few current works dealing with gallbladder disease as a medical problem. This book does more than present the non-surgical point of view held by these men; it reviews and analyzes most of the modern views of gallbladder physiology and pathology as well.

The book is divided into two sections. The first deals

(Continued on page 162)

**PROFESSIONAL PROTECTION**

SINCE 1899  
SPECIALIZED SERVICE

A DOCTOR SAYS—

*"What a rare privilege to be permitted to draw on such marvelous resources of legal protection! Your staff has everything including unexcelled prestige scrupulously lived up to."*

## DIABETICS

Should Die from Old Age — After  
a Useful Life . . .

Curdolac Foods

## *for Diabetics aid in rebuilding health*

WAUKESHA

**WISCONSIN**

## **Important to Your Babies!**



Larsen "Freshlike" Strained Vegetables are first quality garden fresh vegetables cooked, strained and sealed under vacuum to protect vitamins and mineral salts. For further protection we seal in special enamel lined cans.

LARSEN'S  
"Freshlike"  
Strained Vegetables

**THE LARSEN COMPANY, Green Bay, Wis.**

# FOOD-DRINK ADDS AVAILABLE IRON TO THE DIET!

## ALSO RICHLY PROVIDES CALCIUM, PHOSPHORUS AND VITAMIN D

**COCOMALT**, the delicious chocolate flavor food-drink, is a rich source of available Iron. An ounce of Cocomalt (which is the amount used to make one cup or glass) supplies 5 milligrams of Iron in easily assimilated form.

Thus three cups or glasses of Cocomalt a day supply 15 milligrams—which is the amount of Iron recognized as the normal daily requirement.

Used as a delicious food-drink, Cocomalt provides a simple, palatable means of furnishing Iron to growing children, convalescents, expectant and nursing mothers.

### ...and for bones and teeth

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### BOOK REVIEWS

(Continued from page 161)

with gallbladder disease generally and the second takes up cholelithiasis more specifically. There is much repetition in this second section and a consolidation would seem to have been very practical.

Regarding the matter of gallbladder physiology, the authors have studied the literature pertaining to the perennial question of gallbladder motility. They leave the question unanswered, merely pointing out that several factors appear to influence the emptying of the gallbladder, mentioning particularly the structure of the organ, which seems to indicate that it has peristaltic activity, as well as the growing evidence of hormonal influence and the obvious effect of fatty foods upon gallbladder contractility. The exact nature of motility of the gallbladder is yet not entirely understood. It may be chemical, mechanical, hormonal or nervous; it seems to depend, in fact, upon more than one type of stimulus.

The vast subject of the metabolic disturbances of the liver and their relation to gall bladder disease and the formation of gallstones is discussed in this book. The evasive subject of the relationship between blood and biliary cholesterol is touched upon. The authors believe that there is an interdependence but neither demonstrate nor quote proof for this belief. The obvious variation of blood cholesterol in diseases of the biliary tract is mentioned and recent works concerning the fluctuations of the bile acid content of the bile in normals and in disease of the gallbladder are quoted. The authors have accepted this work too readily. They lose sight of the entire lack of basic information on this subject. We do not know the bile acid content of normal bile, nor do we know the ratio of cholic acid to deoxycholic acid in normal or diseased bile. The methods for the determination of bile acids which have been described in published works so far have not considered all of the factors in bile salt determination and the work cannot be accepted as yet.

The primary purpose of this book is to emphasize and dilate upon an aspect of the medical treatment of gallbladder disease which has engaged the attention of Dr. Rehfuss for several years. He holds the view that the etiology of gallbladder disease is infectious and points out that a large per cent of patients having gallbladder troubles have a history of previous infectious diseases and present numerous foci of infection. This view is supported by much research which has been carried out by Dr. Rehfuss and by many others upon the bacteriology of the gallbladder wall and of bile of operated cases. He summarizes his own conclusions in the statement that no one organism is responsible for chronic cholecystitis but organisms from widely different sources are capable of producing infection in the gallbladder. The mode of infection is thought to be hematogenous in the majority of cases. The therapeutic inferences from this view of the pathogenesis of gallbladder disease is obvious. Foci of infection, be they in teeth, rectum, sinuses or elsewhere, must be sought out and eradicated. Also vaccines or bacterial filtrates must be obtained from the organisms in these foci and should be administered to the patient over extended periods. Dr. Rehfuss and others have devoted much thought and experimentation to the establishment of this thesis and one should not dismiss it without serious consideration. However, clinicians generally have not credited this idea and vaccine therapy in gallbladder disease is not in common usage.

The authors discuss at length the other important medical agents in the treatment of gallbladder disease including diet, duodenal drainage, antisepsics, symptomatic treatment and briefly the use of such choleric agents as Decholin.

In summary, this book can be regarded as a good, general survey of the medical aspects of gallbladder disease for the general practitioner and student, with the warning that all of the physiological problems have not been solved and that the major therapeutic thought in this book has not been generally accepted.

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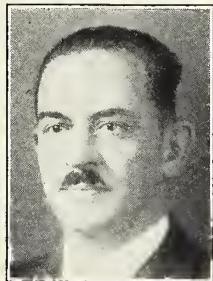
NUMBER 4

### INDIANA'S PROGRAM IN MATERNAL AND CHILD HEALTH UNDER THE SOCIAL SECURITY ACT \*

ALBERT McCOWN, M.D.†

WASHINGTON, D. C.

As simply as possible, I want to outline for you one of the parts of the Social Security Act (title V, part 1) that is to be administered by the Children's Bureau.



Albert McCown, M.D.

and also a responsibility—a responsibility for meeting this whole question with a fair and open mind, accepting that which is workable and rejecting that which is unworkable, and all in the best traditions of the medical profession.

In the words of the Act, the funds are authorized "for the purpose of enabling each State to extend and improve, as far as practicable under the conditions in such State, services for promoting the health of mothers and children, especially in rural areas and in areas suffering from severe economic distress."

I am particularly glad to do this before you, the Secretaries of the County Medical Societies of Indiana, for it is in the local communities embraced by your county societies that these maternal and child health services will be rendered and it is only with your cooperation that these services will be rendered with fullest effectiveness. An opportunity is presented to you,

The funds appropriated are to be used for payment of part of the cost of the plan of the State health department for maternal and child health services. It is the plan of the State health department. The Federal Children's Bureau has the responsibility for approving the plans submitted by the States. Otherwise, the role of the Bureau is consultative. It is obvious that the success of the whole program will be in proportion to the ability of the State and local health agencies to obtain and hold the interest and cooperation of the medical profession, of dental, nursing, and welfare agencies, as well as of the lay organizations that are involved in a unified health program. For such a program—in union there is strength.

State funds appropriated or otherwise provided by the State itself must be made available for part of the costs of approved plans. Funds for maternal and child health services appropriated or made available by political subdivisions (counties, towns), may be used also, provided such local activities are brought into the State plan and under the supervision of the State health department.

Before approval can be given by the Chief of the Children's Bureau, State plans must fulfill the following requirements:

1. Financial participation by the State.
2. Administration of the plan or supervision of administration of the plan by the State health agency.
3. Such methods of administration (other than those relating to selection, tenure of office, and compensation of personnel) as are necessary for the efficient operation of the plan.
4. Provision for reports by the State health agency to the Secretary of Labor.
5. Provision for extension and improvement of local maternal and child-health services.
6. Provision for cooperation with medical, dental, nursing, and welfare groups.
7. Provision for development of demonstration services in needy areas and among groups in special need.

\* Address delivered before the Secretaries' Annual Conference of the Indiana State Medical Association at the Columbia Club, Indianapolis, February 2, 1936.

† Director, Maternal and Child Health Division, U. S. Children's Bureau, Washington, D. C.

These requirements being fulfilled, what of the program itself? To be successful, it must be a long-range program. This Social Security Act is not a relief measure, even though made especially necessary by an economic emergency. Tangible results may be difficult to demonstrate at first, but we hope that plans will be laid for future development as well as to meet present needs.

State plans will vary in the scope of their provisions. Sensible of the fact that health needs and health facilities vary in the various States, the Children's Bureau realizes that no single plan will meet all these needs, and it will welcome a variety of program to meet the needs of individual localities.

We do expect, however, that the plan will function in each State through a division of maternal and child health. In this expectation, we follow the recommendation of our advisory committee, composed of representative physicians, dentists, nurses, and health workers, made at their meeting of last December.

I quote from this report:

"It was the consensus of opinion that there should be in the State department of health a division of maternal and child health or a comparable administrative unit, coordinate with all other major administrative divisions, with a director responsible to the State health officer. It was further suggested that the director should be a physician and that additional medical staff for consultation and advisory services should be composed of full-time or part-time physicians with training and experience in either maternal or child health, preferably both. It was suggested that a full-time dentist be added to the medical staff and that there might be regional advisors to professional groups in the fields of pediatrics, obstetrics, and dentistry. The committee further suggested for consideration by the State agencies that the qualifications for the director of the divisions of maternal and child health be as follows:

"1. Graduation from a recognized school of medicine;

"2. Thorough training in pediatrics or obstetrics or both, and not less than a year's administrative experience in the field of maternal and child health;

"3. Eligibility for examination for medical licensure in the State in which service is to be rendered;

"4. Preferably, training in the fundamentals of public health;

"5. Preferably, at least a year in the private practice of medicine.

"In view of the fact that the number of qualified persons available for positions of this kind is probably not large enough to meet the need, the committee approves the use of funds for the education of personnel.

"As regards participation in a maternal and

child health program by local or other qualified physicians, the committee was of the opinion that such services should be arranged for jointly by the local health department and the local medical association, with the advice of the director of the State division of maternal and child health.

"It was the opinion of the committee that as far as possible the maternal and child-health work in any given area should be carried on by local qualified physicians; and, where such are not available, that other arrangements be made in local maternal and child-health centers.

"The committee also agreed that the medical men taking part in this program should be paid for their services." \* \* \*

"The committee emphasized strongly the importance of the educational features of the program and suggested that the divisions of maternal and child-health services in the several States might well be coordinating agencies for all health education concerning the mother and child."

The committee heartily endorsed the publication of a statement by the Children's Bureau regarding the organization of the Bureau, its general functions, and its aims and further recommended that the medical profession be kept constantly advised of the progress and development of these activities through the medical press. In line with this suggestion, a report, outlining the provisions of the Social Security Act to be administered by the Children's Bureau, appeared in a recent issue of the *Journal of the American Medical Association*.

As practical men, representing the local communities where these services will be rendered, you naturally ask what type of assistance will be given.

I feel that the emphasis should be placed on the development by local health authorities in cooperation with local medical organizations and other local groups, of certain minimum health services for mothers and children, unable to obtain them otherwise, and on State and local programs for education of lay and professional groups in the essentials of adequate maternal and child care.

This program, then, is one of health education and health services, dependent for its success on understanding and cooperation among all groups interested in the health and welfare of mothers and children.

I ask you, therefore, Secretaries of the various Indiana County Medical Societies, to view with an open mind this plan which your State health department will formulate with your advice. I ask you further to go back and explain to your medical societies what is contemplated. The plan does not intend to substitute something new for something old. Its aim is to supplement; its purpose is to enable your State "to extend and improve, as far as practicable, under the conditions in such State, services for promoting the health of mothers and children." Surely, we physicians can unite and further such a plan.

## PROFESSIONAL ANESTHESIA\*

### A HOSPITAL PLAN IN OPERATION EIGHTEEN YEARS

A. L. SCHWARTZ, M.D.  
CINCINNATI, OHIO

The problem of restoring the practice of anesthesia to its rightful place in medicine has been the subject of a great deal of thought and effort

during the past decade. Here and there in the United States forward steps have been taken in this restoration. The medical profession of this country should acknowledge with praise the culmination of the efforts of the Indiana State Medical Association to return the practice of anesthesia to the profession. It is a definite stride forward.

*A. L. Schwartz*

The problem of professional versus nurse anesthesia may be approached from a new angle that casts light on the reason for the overwhelming growth of nurse anesthesia in hospitals throughout the country. If we consider the problem from the point of view of training in anesthesia in the medical schools, hospitals, and post graduate schools, we find that there is a very definite lack of training in the medical schools and facilities for post graduate work.

I made a survey of the medical colleges in the United States by the use of a questionnaire to determine the extent of instruction in anesthesia. Following is a tabulation of the questions and the information received.

#### No. 1.

Questionnaires sent out to all accredited colleges in the U. S.	74
Number of replies	51
Colleges offering two years of medicine only	6
Number of replies available for this survey	45

#### No. 2.

Is there a course in anesthesia for students? Yes, 40; No, 5.

Number of hours of theoretical instruction? Ranges from 4 to 60 hours.

Average number of hours—11.7 hours.

Deducting the college giving 60 hours, the average number of hours is 9.9 hours.

Number of hours of practical demonstration? Ranges from 0 to 50 hours. No average could be determined. Three colleges devote no time to practical demonstration.

#### No. 3.

Is there a department of anesthesia in, or affiliated with your college? Yes, 9; No, 36.

If not, which department supervises the instruction in anesthesia? Surgery, 32; Pharmacology, 4.

In analyzing this survey, it is obvious that despite the inclusion of lectures in anesthesia to the students there is a wide variation in the amount of time devoted with an average of about ten hours given to the entire subject of anesthesia. Furthermore, it is inconceivable that in five medical colleges there is no instruction in anesthesia. With regard to practical demonstration, the extremes are even more marked. Again it is inconceivable that anesthesia is entirely neglected or only given a meager amount of time in the medical curricula. The summation of the replies to the second question may throw some light on the reason for this neglect. In only nine of the colleges that replied is there a department of anesthesia as a distinct and separate unit. To me, this survey indicates a very definite lack of adequate training in anesthesia for the medical students.

Why should anesthesia be ignored in the medical curriculum? Would we neglect the teaching of pediatrics or obstetrics? Anesthesia today requires careful comprehensive training to afford the patient the maximum benefit of the advances made in anesthesia during the past fifteen years. Why should a patient have excellent surgical care and inadequate care from the standpoint of anesthesia? Is it not unfortunate that Dr. Lundy in an address to the anesthesia section of The Mayo Clinic must speak of the inexperienced and occasional user of anesthetic agents?

In addition to the inadequacy of training in the medical schools, the facilities for post graduate training are limited. There are only six hospitals approved for residency in anesthesia in this country. The total number of approved residencies as given in a recent *Journal of the American Medical Association* is eight. Such a small number certainly indicates either a lack of interest in anesthesia, which is tragic, or a disregard of the importance of adequate anesthesia training by the medical profession. Without well established anesthetic services in the hospitals, there is no incentive to the younger men to go into a field of medicine that requires just as distinct and well defined training as any other specialized branch of medicine.

#### A WORKABLE PLAN

The second point in the approach to the solution of the problem of professional versus nurse anesthesia is a definite workable plan for an anesthetic service for the hospitals that will prove satisfactory to the hospital, the surgeon, the anesthetist, and the patient. I am familiar with one such plan that has been in operation eighteen years. It is in operation at the Jewish Hospital, Cincinnati. It

\* Presented before the Section on Anesthesia of the Indiana State Medical Association at the Gary session, October 9, 1935.

is unique in that it assures expert anesthetic service by graduates in medicine to every patient operated upon, charity as well as private. It provides for intern training in anesthesia under the direct supervision of one of the staff anesthetists. This plan costs the hospital nothing. The Jewish Hospital is a 266-bed semi-private hospital. In 1934 there were 2,547 operations. Of these, 1,543 were done under general anesthesia. Of that number, 379 were free cases, 255 were hospital cases which I shall explain later, and 909 were private anesthetics, all given, however, by competent anesthetists. The Department of Anesthesia and Gas Therapy consists, at the present time, of a director and five assistants; three assistants are on the general surgical anesthetic service, one alternate is in charge of gas therapy, and one is on obstetrical call. The director of the department is not called upon to administer anesthetics in routine cases. The three assistants on general surgical call are on service at all times and those cases designated as hospital anesthetic cases are rotated among them. A hospital anesthetic is one in which the staff anesthetists are designated in turn to administer the anesthetic and are paid by the hospital at a predetermined rate depending upon whether the patient is in a private room, two-bed room, or private ward. The anesthetist is paid whether or not the hospital collects from the patient. Because of this, the fee is slightly lower than the standard fees for anesthetics in which the patient is responsible directly to the anesthetist for the payment of his bill. The charity cases are rotated among the three staff anesthetists. They receive no compensation for these cases.

The current rates are as follows! "Private room patients using the hospital staff anesthetist shall be charged \$8 per hour or fraction thereof. After the first hour, private room patients shall be charged \$2 for each full fifteen minutes. No fraction of fifteen minutes shall be charged for. Whenever an anesthetist is called to the surgery after hours, private room patients shall be charged \$12 for the first hour. The usual rate of \$2 for each full fifteen minutes shall prevail in the second hour. In no instance is the second hour to be considered an emergency. Private ward patients using the hospital staff anesthetist shall be charged \$5 per hour or fraction thereof. After the first hour, private ward patients shall be charged \$1.25 for each full fifteen minutes. No fraction of fifteen minutes shall be charged for. Whenever an anesthetist is called to the surgery after hours, the private ward patient shall be charged \$7.50 for the first hour. The usual rate of \$1.25 for each fifteen minutes shall prevail in the second hour. In no instance is the second hour to be considered an emergency. After hours shall be considered any time other than 8:00 a. m. to 1:00 p. m. daily. In no instance shall a staff anesthetist's charge for a hospital case exceed the

sum of \$20." The hospital deducts five per cent from the anesthetists' fees in hospital cases to cover the losses incurred from bad accounts.

The remuneration received in this way for hospital cases, while an appreciable amount, would not be sufficient inducement for these men, and any one of them is permitted to be engaged directly by the surgeon or patient, in which event the hospital makes no charge and the question of fees lies solely between the anesthetist and the patient. These men do not lose their independence or identity. They are not dependent on any one surgeon for their livelihood, but are able to accept special or private cases. They are able not only to add to their income, but also to establish a reputation among patients as well as doctors and to create a demand for their services. The weak point in our plan is the collection of the fees in the hospital anesthetic cases by the hospital, as I believe this tends to minimize the value of the services rendered. If the patient receives a bill direct from the anesthetist, it will make him cognizant of the fact that some particular thought and attention was given to his care. The anesthetist is entitled to the recognition by the patient of this service. Should a patient or surgeon desire some anesthetist other than those on the staff, it is his privilege to have him, in which event the hospital assumes no responsibility. If the anesthetist called is deemed incompetent, he would not be permitted to administer anesthetics in the future. The supervisor of the operating room assigns the anesthetists in rotation to their particular cases the afternoon preceding the operation and they are expected to acquaint themselves with the patient's condition and the nature and character of the operation. They are also expected to watch the progress of the case after operation. That they learn considerable general medicine goes without saying, and they likewise bring to bear on their work a knowledge of internal medicine which is extremely valuable in the giving of anesthetics. If the indications and contraindications for giving certain drugs can engage the attention of the medical profession, surely the much more complicated indications and contraindications of anesthetics and their administration should receive our attention and not be relegated to the nurse and the layman. As stated above, every man on the anesthetic staff is also engaged in the practice of internal medicine. Who is better able to judge a patient's heart action, respiration, or, in a word, his general condition, than the internist? The surgeon does not delegate the postoperative treatment to the trained nurse. When complications arise, he does not trust to her judgment by calling her into consultation. Why then should he depend upon her judgment during the operation itself which, in the vast majority of cases, is the only critical period of the patient's entire illness? It is just as logical to consult a trained nurse after the operation as it is to do so during the operation.

In addition, the surgeon frequently has all that he can do to supervise his own work, let alone the work of a nurse-anesthetist.

#### FULL TIME ANESTHETISTS

I am sure some of you question in your mind why I do not speak of full time professional anesthetists. Cincinnati has no full time anesthetists. All of our better anesthetists are also engaged in the practice of internal medicine. Practically all of the operating in Cincinnati is done in the forenoon, and a full time anesthetist, no matter how large his following, would have difficulty because of this time factor in taking care of a sufficient number of cases to prove worthwhile, inasmuch as travel between hospitals is time-consuming and unpredictable delays are not uncommon. I do not believe that conditions in Cincinnati are so very different from those in other cities, possibly excepting New York, Chicago, and the next three or four larger cities. In addition, the vast majority of the operating in this country is not being done in the large clinics where operating is done with machine-like precision, but most of it is being performed by surgeons in the smaller cities and communities where the services of a full-time professional anesthetist would not be in sufficient demand, and he would be compelled to turn to some other branch of medicine to earn a livelihood. Believing as I do that the average American city cannot keep an anesthetist busy more than a few hours in the morning or a half day at best, and believing, furthermore, that a good internist is potentially a good anesthetist, it seems to me that our future supply of anesthetists must be recruited from men practicing internal medicine who obtain special training, or from graduates of medicines well trained in anesthesia in college and in hospital work.

#### CONCLUSION

In conclusion I would like to quote Dr. Arno B. Luckhardt of the University of Chicago: "I should like to pay a tribute to our anesthetists. This responsible profession has never received from the medical profession and intelligent lay public the recognition which it richly deserves. After all, the life of the patient subjected to surgical intervention is directly in the hands of the anesthetist, who must not only choose the anesthetic best suited to the patient and the requirements of the surgeon, but must be technically so proficient in its administration that the patient will suffer the minimum damages as a result of its use. Unfortunately, the tendency to credit the surgeon for the successful outcome of any operation is too common. Much of his success, and indirectly all of it, is due to the art and science of his anesthetist. Why not give credit to whom it belongs instead of crediting the anesthetist, as is usually done, with all of the untoward results? After all, most of the credit for the relief of distress, pain,

torture, and the unshocked recovery in human and animal surgery is due to anesthesia and the intelligent administration of the anesthetic agent."

19 WEST EIGHTH ST.

#### DISCUSSION

K. C. McCARTHY, M.D., Toledo, Ohio: I enjoyed this paper very much. There is one minor point on which I would take issue, however. Dr. Schwartz said that if a man devotes all his time to anesthesia he will stand around with his hands in his pockets about three-fourths of his time. I have done this work exclusively for the past ten years, and have not found time hang heavily on my hands. I can keep busy all the time and am tired out at night. This is perhaps due to our peculiar situation in Toledo. We have been able to keep nurses out of the hospitals only by devoting a lot of time to charity work for which we receive no remuneration. We have persuaded the surgeons to do their private work in the morning and their charity work in the afternoon. I have frequently given anesthesia for fourteen major operations in one day—mostly charity, you understand. Accordingly, I do not feel that we must condemn professional anesthetists who devote all their time to anesthesia, because in the larger cities they can be kept fully occupied.

A. M. KIRKPATRICK, M.D., Columbus, Ind.: I would like to ask whether dentists ever give anesthetics in The Jewish Hospital at Cincinnati?

FLOYD T. ROMBERGER, M.D., Lafayette: I would like to say that I very thoroughly believe that in Cincinnati their plan works exceedingly well. I know other communities where full-time specialists in anesthesia are fully occupied to useful advantage. I know of still other communities in Indiana and in our neighboring states where the service is carried partly on the shoulders of full-time men and partly on the shoulders of part-time men. I firmly am convinced that we need both types. We have both in Lafayette. Two of us there devote all our time to anesthesia and are busy enough. On the other hand, there are twelve or fifteen men in our city who are competent for the average ether anesthesia, although doing general practice. Without them to help take care of the peak load, we could not get along in our community. So I feel quite strongly that throughout Indiana we need every variety of anesthetist. Consider a town with a twenty-bed hospital. There is no reason in the world why some man in that vicinity should not prepare himself to give superior anesthesia in that hospital. The medical profession owes that service to its community. Such a hospital probably could not support a full-time man doing nothing else, but it could patronize or give work to one, two, or three part-time men. There always is room for good men; one man cannot be tied down 365 days in a year, twenty-four hours a day. Anesthesia actually is medical practice, and we doctors are grossly negligent in our

duty to our communities if we do not take care of it.

A. L. SCHWARTZ, M.D. (closing): As to Dr. McCarthy's statement, I was afraid that some of you might feel that I am not in sympathy with full-time professional anesthesia. I certainly do not want to give that impression; I was merely stating the conditions in Cincinnati. The conversion to full-time professional anesthesia would be a tremendous job. There is only one dentist in Cincinnati that I know who gives general surgical anesthetics. He is a capable anesthetist and has had special training. I feel as Dr. Romberger does, that there must be a definite plan and it must be a plan that has a certain amount of elasticity. The plan I have presented has been in operation eighteen years and the nurse question has been entirely forgotten. However, at some of the other hospitals in Cincinnati the men interested in anesthesia are having a difficult time. The hospitals do not cooperate, they pay a nurse so much per month, usually a nominal salary, and collect for the anesthetics given by the nurses. I am sure that at the end of the month there is a very definite balance on the credit side of the ledger. To institute a change to professional anesthesia requires someone who is willing to make sacrifices and who can enlist the help of the surgeons. A plan such as I have explained costs the hospital nothing. The gas that is used is charged for and the equipment is considered part of the hospital equipment.

I can readily see that in other communities, as Dr. Romberger has said, where professional anesthesia can be started, it should be successful and satisfying to all concerned. Any plan is governed and modified by past circumstances and the attitude of the hospital, the laymen and the medical profession in that community.

YOU WILL NOT  
WANT TO MISS  
THE POSTGRADUATE  
PROGRAMS TO  
BE PRESENTED  
IN INDIANAPOLIS  
APRIL 6-11, 1936

SEE PAGES 194, 195

## LATE TOXEMIAS OF PREGNANCY\*

GERALD W. GUSTAFSON, M.D.

INDIANAPOLIS

In considering any disease, medical minds are prone to think first of etiology. Yet in some conditions, when the etiology is definite and clear, we find ourselves helpless as far as treatment is concerned. For instance, in some cases of puerperal infection, we may know the exact organism, the tissues involved, and the source of infection, and yet be powerless to combat the disease or to change the course.

It is true that we do not know the exact etiology of eclampsia. However, if what we do know about the course and treatment of the late toxemias of pregnancy could be put into general application, our national maternal mortality from the toxemias would drop from its present figure of about 30 per cent to a very low one.

### ETIOLOGY

Zweifel has called eclampsia the disease of the theories, and it is as true now as then. Most authorities subscribe to the toxemia theory, believing that there are toxins present in the blood stream, the source and nature being unknown, but possibly originating from the fetus or placenta, such as bits of chorionic villi or products of fetal metabolism. Concentration changes in substances usually present in the body in definite proportions, such as sodium, calcium, potassium, or magnesium, may act as toxins. The toxins may also be a substance foreign to the body, including the split products of the proteins, such as tyramine, histamine, and ergotamine.

For instance, in pregnant guinea pigs injected by Hofbauer<sup>1</sup> with histamine, changes were produced suggesting premature separation of the placenta and with kidney and liver changes similar to those in eclampsia.

Another theory which has some support is the theory of carbohydrate metabolism change. Eclampsia is in many respects similar to a sudden hyperinsulinism, cases of the latter often having convulsions and showing marked liver change.

Another theory is the infectious theory, though no one has been able to isolate an organism. The endocrines including the thyroid, corpus luteum, and lately the hypophysis have been blamed.

There is also the theory of biological reactions. Dienst in 1905 tried to show that fetal cells invaded the maternal organism and produced changes in agglutination in the blood. McQuarrie studied the question of iso-agglutination and found that it occurred far more frequently when the maternal and fetal bloods were incompatible. Allen, in a

\* Presented before the Indianapolis Medical Society, October 29, 1935.

<sup>1</sup> Hofbauer: Amer. J. Obs. and Gyn., 12, 159, 1926.

much larger series of cases, could not corroborate the findings of McQuarrie. Moreover, the inter-agglutination theory cannot explain the occurrence of eclampsia with hydatid mole and chorio-epithelioma, since in the majority of instances the degenerated villi contain no fetal blood.

Oku<sup>2</sup> reported a large series of cases in which he showed that toxemia occurred with equal frequency in cases having the same blood grouping, and in those where the grouping was in variance.

Included in the biological theories is the anaphylactic theory, the principle being that fetal protein enters the maternal circulation, causing an anaphylactic reaction. Recently it has been shown that many toxemic patients show increase in blood prolan and decrease in blood estrin.

The mammary gland has also been blamed for eclampsia because of the similarity between eclampsia and parturient paresis of cattle.

Finally, there is no definite proof for the many theories, and probably the greatest hope in the solution of the etiology lies in the hands of chemistry.

#### CLASSIFICATION

Stander<sup>3</sup> has classified the late toxemias of pregnancy under (1) low reserve kidney, (2) nephritis complicating pregnancy, (3) pre-eclampsia, (4) eclampsia, and (5) acute yellow atrophy of the liver. For all practical purposes, low reserve kidney is dispensable and, I think, should be dispensed with because the very term implies to the doctor that that type of case is not of necessity serious and does not have to be watched carefully. I believe that all those cases exclusive of acute yellow atrophy and of chronic nephritis without superimposed toxemia, which show non-convulsive toxemia, should be classified as pre-eclampsia, while those showing all evidence of toxemia appearing in pre-eclampsia, plus actual convulsions or coma, should be termed eclampsia.

Eclampsia, then, should be considered a further stage of pre-eclampsia, differing from it only in degree of severity, and occurring in pregnancy, labor, and the puerperium. It has also been described in cases of tubal pregnancy.

#### PATHOLOGY

The main lesions in eclampsia are found in the liver, kidneys, heart and brain, but with the exception of the lesions in the liver, anatomical changes are not constant and characteristic.

**Liver:** Periportal necrosis probably due to capillary stasis is present. However, some authors claim that eclampsia is not dependent upon any one type of hepatic lesion. Bell observed passive congestion, localized infiltration, acute yellow atrophy, infarction, hemorrhagic necrosis and cel-

lular infiltration of portal spaces, but found no typical lesion in all of them.

**Kidneys:** Swelling of glomerular loops, albuminous degeneration of convoluted tubules, hemoglobin cylinders, degenerative changes and sclerosis in vessels and thrombi in glomerular loops have all been found. Hyaline changes and fat deposits are often present. It does not seem that the kidney lesions are characteristic of the disease, but that they are probably more the result than the cause of eclampsia.

**Brain:** The brain often shows edema, hyperemia, anemia, thrombosis, and softening.

**Heart:** Degenerative processes of the myocardium are often present.

**Lungs:** Giant cells have been demonstrated in the capillaries of the lung, and have been identified as masses of syncytium, but their presence is assumed to be a result of deportation, which is now regarded as a coincident of every pregnancy.

Metabolic changes causing an increased load on the cardio-vascular renal system during pregnancy are (1) a tendency toward a positive water balance that is edema, (2) decrease in serum protein, (3) alteration in the nitrogen, fat, carbohydrate, and mineral metabolism, (4) congestion of many tissues and organs, (5) increased permeability of vessel and cell walls, (6) increased absorption of toxic substances from the intestines, and decreased elimination of waste products due to constipation, and (7) increased irritability of the central nervous system.

#### BLOOD CHEMISTRY

**Non-protein nitrogen:** In pre-eclampsia and eclampsia, the non-protein nitrogen remains within the normal range that is usually under 35. The only deviation from the normal is an increase late in eclampsia. Should a nitrogen retention appear in an eclamptic patient, it does so late in the disease, and is evidence that kidney damage plays no role in the etiology of the disease.

**Urea nitrogen** in eclampsia shows no remarkable change, and agrees with the average value for normal pregnancy. However, there is a slight decrease in the urea nitrogen to non-protein nitrogen ratio.

**Uric Acid:** Blood uric acid is often increased even before the outbreak of convulsions. Accumulation of uric acid in the blood in eclampsia is believed to be not the result of decreased kidney function, but rather the result of metabolic change, probably dependent on liver damage. Experiments of Mann (quoted by Stander) on hepatectomized dogs, proved conclusively that destruction of uric acid depends on the liver, and that with liver injury, uric acid accumulated in the blood stream even with excessive excretion of this substance by the kidneys. In the toxemias, a rising uric acid content demands termination of the pregnancy.

<sup>2</sup> Japanese Journal of Obstetrics and Gynecology of December, 1931.

<sup>3</sup> Stander: *Medicine*, Vol. 7, No. 1, p. 4, Feb., 1929.

Blood sugar is probably not changed materially. Titus found the content low just before convulsions, and Stander insists that it is elevated. Many of our own cases have shown the blood sugar at the lower limits of normal, in spite of glucose therapy.

#### ALKALI RESERVE

There may be a decreased CO<sub>2</sub> combining power, sometimes to the level of a true acidosis.

#### SYMPTOMS OF PRE-ECLAMPSIA AND ECLAMPSIA

The eclamptic entity is well known and a description of the symptoms, convulsions, and comatose condition seems unnecessary. Even in the absence of an increase in blood pressure or of albumin in the urine, the occurrence of very sharp epigastric pain, visual disturbance, severe headache and dizziness should make one suspicious of the pre-eclamptic state, and when present, the patient should report immediately to the physician. Often the diastolic pressure is an earlier index of impending eclampsia than the systolic.

Eye ground findings are often of distinct value, but much change from the normal is usually found late in the disease.

Whenever a patient during pregnancy gains much weight within a short time, we must be constantly on the alert for toxemia. Often the first evidence is a gradual increase in blood pressure, followed later by greater increase and albuminuria. Edema may or may not be present. Often a patient will develop a severe pre-eclamptic toxemia without subjective symptoms, though showing a marked increase in albuminuria and blood pressure and decrease in urine output.

After the onset of convulsions or coma during pregnancy, there is usually little difficulty in making a diagnosis of eclampsia. Epilepsy, strychnine poisoning, apoplexy, and hysteria have been mistaken for eclampsia. However, a careful history, urinalysis, blood pressure, eye ground examination, and blood chemistry will leave no doubt as to the diagnosis.

#### TREATMENT OF THE TOXEMIAS

*Prophylaxis:* Time after time we see patients brought into our charity institutions in convulsive toxemia, first seen by a doctor after the onset of convulsions. This is certainly not the fault of the doctors, but can only be laid to one thing, ignorance on the part of the patient. Too many patients know nothing of prenatal care, and even if they have heard something about going to the doctor early, they say, "My mother never did, so why should I?" We must teach every potential mother in Indiana the extreme importance of prenatal care. If she is educated to demand it, then every doctor will be compelled to give it.

It would seem, in our own vicinity, that a yearly program of a maternal mortality prevention week,

devoted largely to educating mothers and prospective mothers, not only to go to the doctor early in pregnancy, but also what to expect as adequate prenatal care, would be of distinct value. This program could well be sponsored here by our own society, or better, a state-wide maternal mortality prevention week sponsored by the State Society or the State Board of Health. At least newspaper bulletins and radio talks could be given on each Mother's Day of the year. Surely this propaganda is as important as that of cancer and diphtheria prevention.

It is a sad state when high school girls often know more about birth control methods than they do about basic maternity care. They are taught Domestic Science, Ancient History and Latin. Would it be asking too much that they be taught something concerning safe motherhood?

In addition to educating our girls to the importance of prenatal care, it is perfectly obvious that we must turn out the type of doctors from our medical schools who will see that proper care is given. The greatest thing that prenatal care accomplishes is prophylaxis against eclampsia.

As soon as a patient develops sign of pre-eclampsia, she must be treated. Frequent urinalysis and blood pressure readings uncover many potential pre-eclampstics. When a patient presents herself with a slightly increased blood pressure and a small amount of albumin in the urine, she should be advised to rest at definite periods throughout the day, and to refrain from salt and high protein content diet. If near term, small doses of magnesium sulphate throughout the day are helpful by removing water from body tissues. If such a patient does not improve in a few days, she should be put to bed and given glucose intravenously. If the blood pressure then continues to increase, the systolic reaching 140 or above, with increase in albuminuria and with or without symptoms such as headache, dizziness, blurring of vision, insomnia, etc., the patient must be hospitalized.

#### TREATMENT OF PRE-ECLAMPSIA

A definitely toxic patient must be watched very closely. Blood pressure readings should be taken every four hours, or more often, and a daily urinalysis done. Diet should be salt free and low in protein. A water-logged patient should not be saturated with additional fluid. However, concentrated glucose should be given. According to Titus, ideal dosage is 75 grams of glucose in 300 cc of freshly distilled sterile water, given over a period of 90 minutes. This should be repeated every eight hours if the urine is not showing glucose. Magnesium sulphate intravenously or intramuscularly has been advocated by Lazard, McNeile, Dieckmann<sup>4</sup> and others in both pre-eclampsia and eclampsia. A dosage of 20 cc of 10 per cent solution is usually given intravenously. This, accord-

<sup>4</sup> Dieckmann: *Am. J. Obs. and Gyn.*, Vol. 29, No. 4, p. 472, April, 1935.

ing to Stander<sup>3</sup>, should not be given more than four times in the course of 24 hours, though much larger doses have been given. Although we occasionally use magnesium sulphate, we place more reliance on glucose, the latter acting as a diuretic and as a protector of liver cells. With or without insulin, it also combats acidosis.

In a very few hours, the pre-eclamptic usually has either greatly improved or has grown worse. If blood pressure and albuminuria have steadily increased, and if the uric acid is increasing, and the CO<sub>2</sub> combining power is decreasing, or if premonitory symptoms have persisted in spite of sedation, the patient must be protected by pre-convulsive interference. How the pregnancy should be terminated will be determined by several factors, including the parity of the patient, age, duration of the pregnancy, condition of the cervix and the general condition of the patient. If the cervix is patulous and thinned, bag induction with or without rupture of the membranes is favored. Simple rupture of the membranes is often used. If a case is a very fulminating one, the patient, a primipara with a long-closed cervix, cesarean section is indicated. In any case, the purpose is to get the pregnancy over with before the toxemia reaches the explosive or convulsive stage. If cesarean is indicated, it should be done under local anesthesia, and should be of the low cervical type. The moment a convulsion occurs, or if the patient goes into coma, the patient has passed into the state of eclampsia, and her chances of recovery are materially lessened.

#### TREATMENT OF ECLAMPSIA

The purpose of treatment is two fold: first, to control the convulsions; and, second, to terminate the pregnancy. In this stage of toxemia, conservative measures give much better results. However, the author does not approve of the original Stroganoff treatment per se. Instead of controlling convulsions by chloroform and chloral hydrate, which may increase the damage to the liver, I prefer sodium amytal with or without morphine. How much sodium amytal should be given depends on the severity of the convulsions. Recently, in a case of postpartum eclampsia, I gave three intramuscular injections of sodium amytal of 7½ grains each. In addition, the patient received ¼ grain of morphine in divided doses. That particular convulsion lasted fifty minutes. Sodium amytal is a real addition to our obstetrical armamentarium in eclampsia.

In controlling convulsions, the respirations of the patient must be watched and should not go below 12 per minute. No inhalation anesthesia should be used. In cyanosis, oxygen is indicated.

Pulmonary edema must be guarded against by placing the patient in such a position that the nose and mouth are lower than the bottom of the chest, and by turning her from side to side every half hour. A bronchoscopist should be available.

During the convulsion the patient is protected from injury. After the convulsions have been controlled, unless the case is one of postpartum eclampsia, labor should be induced. Usually simple rupture of the membranes will suffice. Fortunately, many of these patients go into labor spontaneously. In the vast majority of cases, cesarean section is only mentioned to be condemned. In our experience, venesection and spinal puncture are dispensable and are not without danger. Viratrum viride has been discontinued at almost all obstetrical centers.

If the eclamptic mother recovers, she must be watched carefully for the year following. In many cases it will require a year to determine whether or not the patient has been left with permanent kidney damage. If the urea clearance test is persistently 50 per cent of the normal or less, renal impairment is indicated.

Many patients who have had late toxemia of pregnancy tend to develop recurrent toxemia in following pregnancies.

#### CONCLUSIONS

(1) In pre-eclampsia or non-convulsive toxemia not responding to medical treatment, the pregnancy should be terminated; the method employed should be selected to meet conditions present in the individual patient.

(2) Eclampsia should be treated conservatively. The use of sodium amytal to control convulsions is urged.

(3) It is of tremendous importance that the laity be taught the importance of prenatal care by campaigns in each county, sponsored by the county medical society, the state medical association and the state board of health.

508 HUME MANSUR BLDG.

#### POSTGRADUATE COURSES

INDIANA STATE MEDICAL

ASSOCIATION — APRIL 8, 9

INDIANA UNIVERSITY SCHOOL OF  
MEDICINE — APRIL 6-11

#### CLINICS AND LECTURES

#### PROMINENT OUT-OF-STATE

#### SPEAKERS

PROGRAMS ON PAGES 194, 195

## TOXIC DIFFUSE GOITER (EXOPHTHALMIC)\* ITS DIAGNOSIS AND TREATMENT

J. R. YUNG, M.D.  
TERRE HAUTE

In the study of any subject it is well to have clearly in mind its meaning and what it embraces. In this instance we have accepted the recommendations of the American Association for the Study of Goiter by defining goiter as a disease of unknown cause, the most common characteristics of which are disturbed function and enlargement of the thyroid gland. Also their clinical classification which is based on *constant* physical characteristics and divided into four types. In mentioning the types it is well to include a few of the terms embraced by them:

1. Diffuse non-toxic including adolescent, endemic, colloid.
2. Diffuse toxic including exophthalmic, Graves disease, Parry's disease, primary hyperthyroidism, primary Basedow, hyperplastic, etc.
3. Nodular non-toxic including non-toxic adenoma, foetal adenoma, cystic, hemorrhagic.
4. Nodular toxic including toxic adenoma, adenoma with hyperthyroidism, secondary Basedow.

It is Type 2 of this classification, toxic diffuse goiter, which is under discussion. Though we do not know the cause of the disease we do know the disturbed function of the gland produces an imperfect thyroxin which overstimulates the nervous and circulatory systems, increases metabolism, and when prolonged produces degenerative changes of vital organs.

In over 3,000 examinations for goiter with their trials and tribulations, we have learned, to some extent, evaluation of symptoms and physical findings which we divide into three groups:

1. The non-toxic symptoms principally due to pressure upon the trachea, esophagus, or blood vessels of the neck. These are not common in toxic diffuse goiter but occur frequently in nodular goiters where it is due not so much to size as to the location of a nodule post-tracheal, substernal, or intra-thoracic.

2. Toxic symptoms, physical and laboratory characteristics of which are of diagnostic value, usually begin with a subjective tremor sometimes described by the patient as "an inward nervousness or quiver" not alone noticeable with excitement but present when the patient is in repose. It is apparent to the observer as a fine and sometimes coarse tremor of the extended fingers. There is an eagerness to perform work but the individual is easily fatigued. He complains of a "giving way of the knees." The myasthenia, which is general,

is especially noticeable in the quadriceps extensors by the difficulty or inability to ascend stairs or climb up on the examining table without aid. In the neurasthenic there is a disinclination to physical effort, but when sufficiently urged he performs muscular tasks well.

The toxic goiter case gives a definite time of onset of symptoms as three months, six months, one year, two years, while the neurotic is vague as to onset and usually refers to the duration as several years. There is a sensitiveness to heat and warm moist palms instead of a complaint of the cold and cold clammy hands of the neurasthenic. It is not uncommon for the toxic goiter case suddenly to shed tears without apparent reason.

The characteristic circulatory symptoms of tachycardia and palpitation are persistent and present while the patient is at rest and not just during excitement, worry, fear and sudden noises as is the case in neurotics. A pulse persistently over 90 with the patient at rest with a systolic pressure of 130-140-150 with a low diastolic pressure of 60-50-40 without a diastolic murmur over the aortic area, combined with a flappy quality of the valve tones and sometimes a systolic murmur at the base transmitted to the left, are very significant of toxic goiter.

These patients have a large appetite, nature's effort to obtain the added fuel to meet their increased metabolism. However, in thyroid crisis there is vomiting and diarrhoea. Even with the satisfied large appetite there is a loss of 10 to 30 or more pounds in weight over a period of a few months, while in pulmonary tuberculosis there is poor appetite, elevation of temperature and positive x-ray chest findings.

The symptom of exophthalmos occurs in about 40% of cases and is distinguished from ordinary prominence of eyes by history, peculiar brightness, appearance of sclera between upper lid and cornea, infrequent winking and lagging of upper lid. It should be borne in mind that occasionally only one eye is involved. It is easily differentiated from tumor and arterio-venous aneurism of the orbit.

The thyroid gland is symmetrically enlarged, the lobes retaining more or less their pear shape, firm though occasionally soft, and the surface has a granular feel to the palpating finger. Sometimes a thrill is palpable. In most instances, even in small glands, there is a systolic bruit present over the upper poles which is of great diagnostic importance if there is no systolic murmur present over the aortic area. The polar bruit is not so marked when iodine has been administered and may disappear under such treatment.

A tophonychia is present in many cases. It consists of symmetrical involvement of the finger nails in which they may be concave longitudinally and transversely, but more especially is there a recession of the matrix so that the matrix terminates anteriorly in a concave instead of a convex line. The recession may be so deep from the tip of the

\* Read before the Vanderburgh County Medical Society, November, 1935.

nail that the dirt is removed from under the nail with the greatest difficulty, giving it a very unkept appearance. It is not pronounced in the very early case but is of great value in diagnosing the late and especially the quiescent cases. We have not observed it in any other condition than hyperthyroidism.

Our scientific and machine age is increasing the tendency of our profession to permit an apparatus to make our diagnoses. To have a machine register the data is well enough, but we still must use our minds to interpret and apply such data to the clinical history and physical findings to make a diagnosis. All too frequently patients are referred for a basal metabolic rate only, deeming that rate alone sufficient to make a diagnosis. We rate high the value of the basal metabolic rate but we also realize that it may be misleading. High readings may be obtained through errors of technic, as the result of a leak of oxygen about the mask or tank; or the increased rate may be due to a preceding restless night, fear and unaccustomedness of the patient to the test, and many other factors. In the doubtful, socalled border-line cases, it is necessary to have several basal metabolic rate readings taken to be of value. These patients should be hospitalized for observation. It is not unusual to have the first reading a plus 25, the next plus 15, then plus 10, and at last probably plus 5 or 0. Such a case can be eliminated usually as a nontoxic goiter. Should, however, the rate remain a plus 15 or more, Lugol's solution may be administered while the patient is detained in the hospital. If after a week or two the pulse rate and basal metabolic rate are reduced, one may conclude that the case is one of toxic goiter.

The impedance angle test for thyrotoxicosis, as developed by Mrs. M. A. B. Brazier, Ph.D., B.Sc., of London, England, is based upon the dielectric property of the tissues of the body which varies in thyrotoxicosis. It is not influenced by exercise, food or drugs except those affecting the thyroid gland.

The test is made by a direct reading electrical apparatus easily worked by an unskilled operator and requires only the submersion of the patient's arms in separate containers of salt solution.

This test created great interest in this country where extensive experiments were made. The method gave no material assistance as a diagnostic aid.

We wish to enter into no controversy over treatment with those advocating radiation or measures other than surgery. Our experience has been with preoperative, operative, and a year or more of postoperative care, of approximately 1,500 goiter operations with a mortality of less than 1%. These results have been made possible by the preoperative preparation with Lugol's as advocated by Dr. H. S. Plummer in 1922-1923.

Much has been said and written on the use and abuse of iodine in goiter and it may be permissible

to express my own view here on its use in toxic diffuse goiter. It should not be administered until a definite diagnosis has been made, for it must be borne in mind that if those with a wide experience in goiter find it a difficult task to differentiate some of the toxic goiter cases from neurosis in the doubtful group which have received no iodine, one may conceive how much more difficult it is, if not impossible, to do so when symptoms have been masked by previous administration of iodine. As a curative measure it falls far short of an ideal goal. Though it ameliorates the symptoms, yet, with scarcely an exception, there is a continued semi-invalidism. This does not stand comparison with two to three weeks preparation in the home, five to seven days hospitalization for thyroidectomy with complete remission of symptoms, with a possible recurrence, variously estimated at 2% to 5%. Usually these are controlled by iodine. Dr. H. S. Plummer in 1925 stated that, "Perhaps the most satisfactory result of iodine therapy to both patient and physician has been the control of the recurrent or persistent manifestation of the disease."

As the patient's recovery is the surgeon's responsibility, it is advisable that he have an opportunity to study the case as to severity and cardiac reserve before the administration of iodine. Otherwise a fibrillating and decompensating heart may be regular and the surgeon be given a false feeling of security and undertake a surgical procedure more extensive than the patient can survive. After consent has been obtained for thyroidectomy it is immaterial whether the iodine is administered by the physician or surgeon. Usually the case is in remission in ten to twenty days and subtotal thyroidectomy may be performed with comparative safety.

Toxic diffuse goiter is subject to thyroid crisis either through the natural course of the disease or psychical shock, acute infection, or surgical interventions. The high temperature, rapid pulse, semi-delirium, severe vomiting and diarrhea necessitate the most prompt and energetic treatment to prevent the patient's dehydration and self combustion from lack of fluids and fuel, with resulting coma and death.

The prime indications are to bring about remission by administration of frequent and large doses of iodine by mouth where some is retained and absorbed in the stomach in spite of vomiting. It should also be given per rectum and rarely intravenously. Replacement of fluids and supplying of fuel with saline and glucose is accomplished by proctoclysis, hypodermoclysis or intravenous injections. Give narcotics to control restlessness and diarrhea. When vomiting has subsided, administer large amounts of fluids and high carbohydrate diet. Usually in three to four weeks the patient can be operated safely for subtotal resection or at least a single subtotal lobectomy. In the latter instance, depending upon the severity of the post-

operative reaction, the second lobectomy can be performed in four days to six weeks.

We have encountered toxic diffuse goiter in several children, one as young as four years, with a history of onset at age three years; however, most of them were between the ages of ten and fourteen years. The tachycardia was more pronounced and they had the general appearance of greater severity of symptoms but they withstood the operation as well, and the results were as good as in adults. Therefore, we consider the indications for operation the same as for adults.

Toxic diffuse goiter is occasionally complicated with serious medical disease, surgical and obstetrical conditions requiring careful thought as to procedure. Acute infections, by adding their increased basal metabolic rate to the already high rate of the toxic goiter with a lessened appetite and sometimes nausea, partake of less fluids and food and by dehydration and lack of fuel precipitate a thyroid crisis. We should have in mind that it is much easier to prevent than to bring one out of a crisis and institute crisis treatment early as a preventative. A thyroidectomy can be performed safely two to three weeks after subsidence of fever. Glycosuria and diabetes are no bar to operation. In fact hyperthyroidism intensifies the symptoms of diabetes and increases the likelihood of coma. Joslin and Lahey have shown that in hyperthyroidism the blood sugar is high and much care should be exercised to prevent an erroneous diagnosis of diabetes. Following thyroidectomy the sugar tolerance is increased and the diabetics more easily managed. The operative mortality is not materially increased.

Of the grave cardiac cases with hyperthyroidism, we have operated upon patients with angina pectoris. With the relief of the hyperthyroidism there was a marked relief of the angina. Such, however, was not the case with hypertension patients some of whom we have operated in the presence of a systolic pressure of 220. With the relief of the hyperthyroidism there was a drop in blood pressure for a few weeks, probably due to bed rest and blood letting, but soon the pressure was back to the point prior to thyroidectomy.

Not as frequently as formerly, we see cases of hyperthyroidism with congestive heart failure being advised they could not survive surgical interference. We have seen such cases confined to bed for a year advancing to a state of general anasarca. With the use of salygen, iodine and the judicious use of digitalis, these patients have been operated upon in stages and returned as useful members to their homes. It is not necessary to relieve the arrhythmia before but if this persists a week or more after the completion of the surgery one may, unless contraindicated, use quinidin.

Ordinarily it is better, in elective surgical conditions with hyperthyroidism, to perform the thyroidectomy first and avoid a possible thyroid crisis. All who have done surgery recall operating

non-infected cases which had a rise of temperature to 104°, pulse 140 or more, restlessness and vomiting, the evening of the operation and after forty-eight hours begin to subside. Then proceed with a normal convalescence in another twenty-four hours. In most of these cases there was an unrecognized enlargement of the gland and the reaction was post-operative hyperthyroidism. However, in such emergencies as acute cholecystitis and obstructed duct, appendicitis, or bowel obstruction, it is obvious that the emergency must first be met. One should begin promptly such measures as are possible in the case to prevent crisis.

In cases with a history of very recent severe hemorrhage from uterine fibroid, hemorrhoids, gastric or duodenal ulcer, it is again obvious that thyroidectomy should be secondary. Usually time permits these patients to be Lugolized and in a state of hyperthyroid remission before the operation for the relief of these recurrent hemorrhages is performed. When convalescence is established, thyroidectomy may be performed.

We have operated upon eight patients with hyperthyroidism complicated with pregnancy with no death and all delivering at full term except one who miscarried at six months. This experience approximates the thirty-five cases studied at the Cleveland Clinic by Lehman who states, "A properly conducted thyroidectomy is much more satisfactory and is attended with less risk than an interruption of pregnancy." Fahrni had a similar experience. R. D. Mussey and W. A. Plummer of the Mayo Clinic state, "Whereas, formerly, interruption of pregnancy was usually advised in severe cases of hyperthyroidism complicating pregnancy, and whereas miscarriages were prone to occur spontaneously if treatment was not given, it has been demonstrated that the operation of partial thyroidectomy in cases of adenomatous goiter with hyperthyroidism and, since 1922, the use of compound solution of iodine internally in cases of exophthalmic goiter, followed by partial thyroidectomy when this procedure is indicated, enable the pregnant woman to carry through pregnancy with reasonable expectancy of health and of normal living offspring."

In toxic diffuse goiter, patients within two months of expected delivery and symptoms ameliorated by administration of iodine, we wait until after confinement to do thyroidectomy.

ARE YOU PLANNING  
TO BE IN INDIANAPOLIS  
APRIL 6-11, 1936?  
*(See Pages 194, 195)*

## REPORT OF THREE THOUSAND CASES OF AVERTIN ANESTHESIA\*

LILLIAN B. MUELLER, M.D.  
INDIANAPOLIS

The use of avertin is well out of the experimental stage and has become a recognized addition to our list of basal anesthetics. The fact that it has become so popular, and the fact that at the Methodist Hospital, in Indianapolis, we have had a larger number of cases than any one hospital in the state of Indiana, makes me feel that a report of our experience with the drug would be of interest.

### HISTORY

Avertin,  $C Br^3 CH^2 OH$ , was first prepared in 1923 by the German investigators Duisberg and Willstaetter. It was not until 1927 that Eichholz<sup>1</sup> demonstrated its true anesthetic properties. It was used for some time in Germany before it was accepted in this country. Its use was not entirely successful there, because it was employed in doses which were later proved to be too large. Its use was attended by extreme depression in many cases, and by a number of deaths. Beginning in 1929, many anesthetists in this country began to use it both experimentally and in actual practice, and to work out the physiological action of the drug.<sup>2</sup>

Avertin fluid is tribromethonal in amylenhydrate. The latter is in itself a hypnotic, and, according to Grossman<sup>3</sup> and others, enhances the action of the tribromethonal.

The great advantage of avertin to the patient is that it produces a very natural sleep, which comes on pleasantly, is accompanied by complete amnesia, produces a certain degree of muscular relaxation, and is followed by a pleasant awakening, usually without nausea or vomiting.

\* Presented before the Section on Anesthesia of the Indiana State Medical Association at the Gary session, October 9, 1935.

<sup>1</sup> Eichholtz, Fritz: Ueber rektale Narkose mit Avertin (E-107). *Deutsche med. Wochenschr.* 53:710 (Apr. 22) 1927.

Eichholtz, Fritz: Zur Theorie der Avertinmarkose. *Deutsche med. Wochenschr.* 55:1537 (Sept. 13) 1929.

<sup>2</sup> Waters, Ralph M.: New methods of producing general anesthesia. *Am. Jnl. Surg.* 9:145 (July) 1930.

Report of Council: Avertin. *J. A. M. A.* 95:1427 (Nov. 8) 1930.

Lundy, J. S.: The general anesthetic tribromethanol alcohol (avertin: E-107); review of the literature on its rectal and intravenous use. *Proc. Staff Meet., Mayo Clin.* (supp.) 4:370 (Dec. 18) 1929.

Dixon, W. E.: A new type of general anesthetic. *Brit. M. J.* 1:896 (May 26) 1928.

<sup>3</sup> Grossman, H.: Avertinlosung in Amylenhydrat. *Zentralbl. f. Gynak.* 53:780 (Mar. 30) 1929.

### PHYSIOLOGICAL ACTION

Eichholtz,<sup>1</sup> Straub,<sup>4</sup> Parsons,<sup>5</sup> Welsch<sup>6</sup> and others studied the effects of avertin on the respiration and circulation.

*Circulation*—Parsons<sup>5</sup> found in his experimental work that avertin in anesthetic doses has no appreciable effect on the cardio-vascular system. In larger doses it slows the rate and weakens the force of the heart beat. The coronary vessels dilate and the blood pressure falls. Other workers found that no histological changes occur in the heart following repeated administration.

*Respiration*—Avertin anesthesia is accompanied by marked slowing of the respiration. Toxic doses of the drug cause death by respiratory paralysis.

*Kidney*—Bruger, Bourne, and Dreyer<sup>7</sup> found that kidney function is depressed with avertin but the depression is transient and the kidney function soon recovers, usually within four to six hours. The depression of kidney function is less in actual practice than animal experiments might indicate, because the anesthetic doses used in man are much smaller than the doses used in dogs. This is borne out in our own experience by the fact that we have used avertin repeatedly in nephrectomies, where the other kidney was normal, without any marked depression or kidney function.

*Liver*—Bourne and Raginsky<sup>8</sup> performed experiments on normal dogs and on dogs whose livers had been impaired. They found that avertin produces only very mild parenchymatous and fatty degeneration of the liver in normal animals. In animals whose livers were impaired by chloroform, the avertin produces from five to thirty per cent additional damage, but this added liver damage disappears within twenty-four to forty-eight hours. They conclude that avertin can be used with safety even in patients with moderate liver damage. As regards liver function, avertin compares well with the inhalation anesthetics.

It is not the intent of this report to present anything in the way of research or experimental findings, but simply to present our cases since the beginning of 1933, when we began to use avertin rather extensively, with some of our clinical observations and deductions.

### REPORT OF CASES

Our cases from January 1, 1933, to October 1, 1935, number 3,338. These anesthetics all were

<sup>4</sup> Straub, Walter: Rectalnarkose mit Avertin. *Munchen. med. Wochenschr.* 75:593 (Apr. 6) 1928.

<sup>5</sup> Parsons, F. B.: Some pharmacological aspects of avertin. *Brit. M. J.* 2:709 (Oct. 19) 1929.

<sup>6</sup> Welsch, Albert: Chemische Untersuchungen zur Avertinfrage. *Arch. f. exper. Path. u. Pharmakol.* 139:302, 1929.

<sup>7</sup> Bruger, M.; Bourne, Wesley; and Dreyer, N. B.: Effects of Avertin on liver function: the rate of secretion and composition of the urine, the reaction, alkali reserve and concentration of the blood and the body temperature. *Am. Jnl. Surg.* 9:82 (July) 1930.

<sup>8</sup> Bourne, Wesley; and Raginsky, B. B.: The effect of avertin upon the normal and impaired liver. *Am. J. Surg.* 14:653 (Dec.) 1931.

given by members of the anesthetic staff, who are without exception graduate physicians. Care was taken in estimating the dosage, in preparing the solution, and instilling the enema slowly into the rectum.

Our procedure is as follows: The night before the operation a cleansing enema is given, and a hypnotic such as nembutal or amytal is administered to produce a restful night's sleep. If the patient is not in the hospital the preceding night, the enema is omitted, since disturbing the bowel may cause the avertin enema to be partially excreted, and consequently the anesthetist is not certain of the dosage the patient receives. Usually a hypodermic of morphine, gr. one-sixth or one-fourth, with atropine or scopolamine, is given forty-five minutes before operation.

The anesthetist takes a tray containing the necessary articles for mixing and administering the avertin to the patient's room, and computes the dosage according to the patient's weight, which has previously been measured and recorded. To children, young healthy adults, and patients with toxic thyroid disease, a dose of 100 mg. per kilogram of body weight is given. To the aged, debilitated, or obese patients, a smaller dose, varying from 75 mg. to 90 mg. per kilogram of body weight is given. To the measured amount of distilled water, sufficient to make a two and one-half per cent solution, is added the computed amount of avertin. This is shaken vigorously. The solution is tested with congo red, and if there is no change in color, it is instilled slowly into the patient's rectum by means of a small colon tube and a funnel. The colon tube is inserted not more than two or three inches, and the injection is given slowly. By observing these two precautions the severe drop in blood pressure caused by too rapid absorption into the blood stream is prevented. The patient becomes drowsy and falls asleep in from five to fifteen minutes. He is then lifted to the cart and taken to the surgery.

#### CONTRA-INDICATIONS

The usually accepted contra-indications have been observed by us. We have not used avertin in cases where there is impairment of liver function, where there is serious bilateral disease of the kidneys, in ulcerative conditions of the rectum, or in extremely debilitated or cachectic patients. On the other hand, we have used avertin in the aged, in patients who had tuberculosis, and cautiously in diabetics, with entire success and satisfaction.

*Degree of Anesthesia:* In our early experience we gave avertin in doses intended to produce complete anesthesia. We soon altered our procedure and now aim simply for basal anesthesia, although frequently no supplemental anesthetic agent is required. In 2,000 cases which I have tabulated, 320, or sixteen per cent, required no supplemental anesthesia. In 124, or six per cent, local anesthesia only was used in addition to the avertin; 695, or thirty-four per cent of our cases, were supplemented

by ether; 851, or forty-two per cent, were supplemented by gas, either ethylene or nitrous oxide; four cases received a few inhalations of ethyl chloride, and six cases received sacral anesthesia.

#### CLASSIFICATION

Breast	50
Laparotomies:	
Gall bladder	73
Appendectomies	215
Laparotomy	237
Hysterectomy	14
Exploratory laparotomy	13
Laparotomy and vaginal	38
Bowel obstruction	2
Gastroenterostomy	6
Stomach	3
Witzel enterostomy	3
Resection of sigmoid	2
Vaginal:	
Vaginal	62
Vaginal hysterectomy	50
Vaginal—insertion of radium	10
Vaginal and rectal	3
Thyroidectomy	40
Ear, Nose & Throat:	
Mastoid	90
Nasal and sinus	74
Tonsillectomy-adenoidectomy	59
Cancer of nose	3
Laryngectomy	1
Bronchoscopy	14
Fractured nose	11
Pharyngeal abscess	1
Esophagoscopy	11
External ear	2
Septal abscess	3
Submucous	13
Eye	15
Hernia	93
Rectal	40
Genito-Urinary Tract:	
Kidney operations	44
Transurethral resections	108
Perineal abscess	1
Suprapubic prostatectomy	11
Bladder stones	8
Orchidectomy & hydrocele	15
Circumcision	3
Suprapubic cystotomy	8
Cystoscopies	6
Orthopedic:	
Fractures, casts, etc.	372
Amputations	6
Tumors of extremities	4
Spinal fusions & laminectomies	9
Chest Surgery:	
Rib resections	10
Thoracoplasty	16
Aspiration of chest	2
Head & Neck:	
Gasserian ganglion	29
Neck cases	21
Jaw cases, fractures, etc.	25
Skull tumor & fracture	3
Scalp injuries	6
Cleft palate	4
Operations on mouth & tongue	14
Brain tumors	5
Tooth extractions	3
Miscellaneous:	
Inguinal abscess	2
Subdiaphragmatic abscess	1
Lipectomy	2
K. B. transfusion	1
Therapeutic, tetanus, etc.	4

An analysis of this series of cases shows avertin used for a wide variety of operations. Breast cases do well under it because patients go to sleep in their room and have no knowledge or memory of the whole proceeding until it is well over. Little or no supplemental anesthesia is required and these patients usually have no nausea or vomiting.

Laparotomies totaled 606. This included 73 gall bladder operations, 215 appendectomies, 14 hysterectomies, and a variety of other operations. In these cases ethylene was usually given to supplement.

There were 125 vaginal cases. One point in this connection was an observation by a radiologist that his cases of radium sickness and reactions were much less when avertin was used than under other anesthetics or no anesthetic.

Avertin is particularly useful in thyroidectomies. Here we are dealing with a nervous, apprehensive patient, and avertin removes all the psychic shock, and gives a prolonged post-operative sleep which is very desirable. On account of the increased metabolic rate in hyperthyroid patients, a slightly larger dose of avertin should be given. We have not exceeded 100 mg. per kg., although Desmarest,<sup>9</sup> a French author, reports using as high as 200 mg. per kg. successfully.

In eye, ear, nose and throat surgery, avertin has proved a valuable adjunct. Sinus work and submucous operations can often be performed under it without supplementary anesthesia. In tonsil and adenoid operations it saves a nervous child the often terrifying experience of entering the surgery and taking an inhalation anesthetic. Smaller doses are used in these cases (60 to 70 mg. per kg.), just enough so that the child falls asleep quietly in his room, and has no knowledge of being transported to surgery. The throat reflexes are usually still present with doses of this size, and a very small amount of ether, about one-fourth the amount usually required, will abolish these. In nasal operations, the post-operative care must be watchful until the pharyngeal reflex returns, so as to prevent blood and clots slipping from the naso-pharynx into the pharynx and larynx and obstructing respiration.

Avertin has been used successfully in operations on the genito-urinary tract. Our series includes 108 transurethral resections. Since these are always in older men, smaller doses of avertin are used and supplemented with nitrous oxide and oxygen if necessary. One interesting observation is that these patients sleep quietly until the bladder distention reaches a certain point, when they begin to show signs of restlessness and move about, thus giving the surgeon a warning of over-distention of the bladder. When the bladder is emptied, the patient again becomes quiet.

#### SERIES ANALYSIS

In this series the smallest dose given any one patient was .8 cc. of avertin. This patient was a little girl, two and one-half years old. The operation was reduction of a congenital dislocation of the right hip. She fell asleep in her room and came to surgery perfectly quiet, but did not have sufficient muscular relaxation to allow the manipulation of the hip; therefore, a small amount of ether was given during this part of the operation. She was fully conscious thirty minutes after her return to her room and was dismissed from the hospital the second day following.

The largest dose used was 10 cc. The patient receiving this amount was a man, A. S., age thirty-seven, weighing 176 pounds. Eight cc. of avertin (100 mg. per kg.) was given in the patient's room. He was asleep on coming to surgery. As the operation started, he moved considerably and one cc. of avertin additional was given. About one hour later another cc. of avertin was administered, making 10 cc. or 125 mg. per kg. in all. Ether was used intermittently. Pulse varied from 92 to 140, good volume. Respiration was somewhat obstructed by the position on the table. Operation lasted two hours and twenty-five minutes. Patient left surgery in good condition, and made a good post-operative recovery.

One patient was returned to his room without operation after receiving avertin. This case was a male, age thirty-four, Polish, weight 130 pounds; diagnosis: brain tumor; blood pressure 120/90. He received 5.9 cc. of avertin fluid per rectum (100 mg. per kg.). On going to surgery fifteen minutes later, the pupils were dilated and the patient talking incoherently. A few inhalations of ether were given and the patient placed on the surgery table face down. As soon as this was done, respirations became slow and then ceased. The patient was removed to the cart and artificial respiration with inhalations of CO<sub>2</sub> and O<sub>2</sub> were given continuously for fifty minutes. At the end of this time respiration started and the patient returned to his room with pulse 92, respirations 20. Medication given during this time was three ampules of caffein sodio benzoate and one ampule of lobeline. Three days later a decompression of the skull was done under local anesthesia only, without accident. The patient made a good post-operative recovery and left the hospital improved.

One patient, age seventy-one years, received avertin eight times in a little less than a year. The operative procedure in each case was cauterization of a cancer of the tongue, and leukoplakie patches of the mouth and jaw. He showed no abnormal urinary findings at any time.

Avertin was used therapeutically in four cases. Of these, two patients received very large doses. One, a case of tetanus, received a total of 68 cc. of avertin. The other received a total of 107.5 cc. in twenty-two doses in a period of six days. In neither case was there any evidence of damage to liver or kidney function.

<sup>9</sup> Desmarest: Six hundred cases of anesthesia by means of combined tribromethanol and nitrous oxid-oxygen. *Anesth. and Analg.* 14:59 (Mar.-Apr.) 1935.

A group of 180 cases chosen at random were studied in regard to nausea and vomiting, blood pressure, and duration of the anesthetic.

#### A. Nausea and Vomiting

	No Inhalation		
	Anesthetic	Ether	Gas
Nausea and Vomiting	1	19	10
No Nausea and Vomiting	35	46	64

One hundred and seventy-five cases were checked in regard to this point. Only thirty of these, or seventeen per cent, had any nausea and vomiting, and in most of these it was slight, the largest group being in cases where ether was used to supplement the avertin. In cases in which no inhalation anesthetic was used, only one patient vomited, and this was a case in which a sinus operation was performed and the patient swallowed a considerable quantity of blood which was regurgitated.

#### B. Blood Pressure

This point was observed in 150 cases. It was found that in most cases there was a slight fall in the blood pressure immediately after the administration of avertin and that this averaged 16 mm. for the systolic and 9 mm. for the diastolic. In 96 cases there was a further fall occurring during the operation, until, on return to the patient's room, there had been an average fall of 23 mm. systolic and 13 mm. diastolic. In 30 cases there was a rise within the first five or ten minutes, averaging 9 mm. systolic and 4 mm. diastolic. In thirty cases the blood pressure showed a rise at the close of the operation averaging 13 mm. systolic and 7 mm. diastolic. In only seven of the 150 cases was the fall in blood pressure severe and in all these other factors entered in.

Taylor and Lund<sup>10</sup> performed a series of experiments to determine whether the fall in blood pressure after avertin was in any way related to surgical shock. They conclude that on the basis of the prompt and uneventful recovery made by these patients, and their "response to ephedrine, that the condition is considerably less grave than surgical shock."

#### C. Duration of Anesthesia

A group of 100 records were checked in regard to this point. The shortest time elapsing in any one case between the administration of the avertin and first signs of awakening was one hour, and the shortest time in which any patient was completely awake was one hour and forty five minutes.

The longest time elapsing before the patient showed first signs of awakening was seven hours, and in one case twenty hours elapsed before the patient was fully awake and remembered.

The average time of first response to external stimulation was two hours and fifty-eight minutes, and the average time of return to complete consciousness was four hours and fifty-one minutes. There is considerable variation in the duration of

narcosis. According to Sollmann<sup>11</sup> this is due to difference in rate of absorption and excretion. Other factors enter in, such as the type of operation performed and the amount of inhalation anesthetic used. Occasionally a patient will fail to have any narcosis from a dose, which will cause another patient to sleep for hours.

#### DANGERS

One danger which is sometimes spoken of in regard to avertin is irritation of the rectum, which may cause diarrhea, or even sloughing of the rectal mucosa. There has not been a single instance of rectal irritation in our entire series.

The chief complication which we have had to combat was respiratory depression. This can be caused by the depressing action of avertin on the respiratory center, but in most cases it is due to mechanical obstruction. Soon after the administration of avertin, the muscles of the throat and jaw relax, and the tongue drops back into the pharynx, preventing an open airway. This condition persists until the reflexes begin to return. The difficulty can usually be obviated by the use of a metal or hard rubber air way tube, which should be left in place in the patient's throat until the necessity for its use is passed. Nurses should be instructed to watch for cyanosis and be sure that the breathing is unobstructed. They must also be taught how to draw the tongue forward and to change the position of the head and neck in the most favorable position for free and easy breathing. Maxson<sup>12</sup> recommends the use of an intratracheal catheter passed through the nose into the trachea, left *in situ* until the patient's protective reflexes return.

#### TREATMENT

Several drugs have proved useful in combating collapse and respiratory depression.

Inhalations of oxygen with five per cent carbon dioxide are employed as first aid.

Caffeine sodio-benzoate, with or without ephedrine, is used as a circulatory stimulant. Ephedrine may be used to combat the fall in blood pressure either prophylactically or after the fall has occurred. In most of our cases we have not found the use of ephedrine necessary.

In the last few months Killian<sup>13</sup> and others have recommended the use of coramine for combating poisoning from narcotics and hypnotics. He says that not only is the depth of the sleep from avertin decreased by coramine, but its duration can be diminished. We have used coramine in a number of cases as an "awakener" in doses of two or three

<sup>10</sup> Taylor, Grantley W., and Lund, Charles C.: Blood pressure fall occurring in avertin anesthesia. *New Eng. J. Med.* 266: 612 (Mar. 24) 1932.

<sup>11</sup> Sollmann, Torald: A Manual of Pharmacology. Philadelphia. W. B. Saunders Co. 4th ed. 1932, pp. 751-753.

<sup>12</sup> Maxson, Louis H.: A safety measure for use with avertin and other basal anesthetics. *Anesth. and Analg.* 12:84 (Mar.-Apr.) 1933.

<sup>13</sup> Killian, Hans: The use of eoramin for combatting poison from narcotics and hypnotics, from an experience of over 200 cases. *Anesth. and Analg.* 14:23 (Jan.-Feb.) 1935.

ee. intravenously, with apparently satisfactory results. Our number is too small to report a definite conclusion.

#### MORTALITY

In looking over the literature I find that there is considerable confusion in the minds of authors as to what could properly be called a death due to avertin, and how long after administration a death could be ascribed to the effect of avertin. Excretion of avertin occurs in the urine and its sojourn in the body is very brief. Parsons<sup>4</sup> states that fifty-three to seventy-three per cent is excreted in the first twenty-four hours.

In this series of cases there was no instance of a death on the table. There were no deaths occurring in the first twenty-four hours following the administration of avertin which could be attributed to the anesthetic. The surgical deaths which occurred after the twenty-four-hour period were clearly due to other causes.

#### SUMMARY

This report comprises a report of 3,338 cases of avertin anesthesia in the Methodist Hospital, of Indianapolis.

Avertin was used satisfactorily for all types of surgery, including laparotomies, vaginal operations, thyroidectomies, rectal surgery, genitourinary surgery, and oto-laryngological cases.

Post-operative nausea and vomiting, usually very slight, occurred in seventeen per cent of cases. Blood pressure falls averaged 16 mm. within ten minutes after administration of avertin, and 23 mm. by the end of an hour.

The average duration of unconsciousness was two hours and fifty-one minutes.

The chief danger was respiratory depression. This is combated by maintaining an open airway, by the use of oxygen and carbon dioxide inhalations, caffeine sodio-benzoate, with or without ephedrine, and coramine.

There was no death from avertin in this series.

#### DISCUSSION

C. N. COMBS, M.D. (Terre Haute): Dr. Mueller certainly has had a fortunate and delightful experience with avertin, and her paper was very conservative, and yet I take it that she recommends it to each of us to use, and that it can be used by every anesthetist in Indiana, even in the smallest hospital, because of the simplicity of administration and the safety if used properly as indicated. From personal experience, I have been slow in taking it up, but I find that it can be started on such a cautious basis that you can learn to use it by stages, and finally work up to use it properly. I have used 80 mgm. and 90 mgm., and not in any patient over fifty years of age. I am working my way carefully, and I think it can be done in any place.

I was fortunate in being present at the Congress of Anesthetists in 1928 when Dr. C. Helmuth Schmidt of Hamburg and Dr. Hans Killian of Freiburg brought us the first news of avertin. My interest then was only academic, but now I am very much interested. It appeals to me because of its value in children. We have been in the habit of giving barbiturates and morphine to adults and they come to the operating room in a quiet state, but children will come in screaming with terror, and an administration of avertin in the room will stop that. I have not used it for tonsillectomies. I believe it is good in fractures, and it will get away from explosive gases in the fluoroscopic room; it also is good in osteomyelitis and for the open reduction of fractures. I saw Dr. Paul Wood of New York give an anesthetic to a young baby a few months old for a cleft palate operation. Of course you know how much you are in the road in a cleft palate operation where you are being pushed out of the way all the time, and for that, avertin appeals to me. The operator can hold the child in his lap and work on the cleft palate to his heart's delight. Dr. Walter Dandy of Baltimore was in Terre Haute a few days ago and made the statement that the technic of brain surgery had almost been revolutionized by the use of avertin, and that it did away with the swelling of the brain which had formerly been experienced.

I think it would be wonderful in laminectomies, because of the disadvantage of giving ether with the patient in a prone position. I would emphasize the necessity of using the airway and leaving it in until the patient coughs it out, because your patient is certainly in danger if you take any chances on that. I think aside from the professional advantage there is an economic advantage in the use of avertin, as Dr. Romberger pointed out when he talked about spinal anesthesia several years ago. We should be versatile; surprise the surgeons and the public by bringing up something new once in awhile to enhance our prestige, and to assure our continued use by the surgeon, and that will be an additional spike in the coffin of the technician anesthetist. The more we use these things the more we show that medical anesthesia is the ideal.

MARIE B. K. KUHLMAN, M.D. (Oakland, California): I want to say a word in praise of Dr. Mueller. Her report is an excellent one, and I am very proud that she exemplifies the type of professional anesthetist we all are striving to be. You use the word "men" so much that I wish you might use a more flexible phrase to include the women who work so well among you. I came from California with a peculiar impression of the practice of anesthesia. When I went to California I had been trained to the professional anesthetist idea and was there surrounded by nurse anesthetists. In San Francisco, Dr. Mary Botsford, one of our faithful workers for the cause, has succeeded in holding the fort so that the nurses have not invaded all of the hospitals. In a quiet manner, as

is becoming a newcomer, I tried to keep myself inconspicuous and work with them. That was not easy, but I succeeded and managed to get within the ranks to see how things were going on. Even though there is a state law prohibiting nurses from administering anesthetics, they are employed in almost every hospital. When I wanted to work, I worked gratis, or when I substituted for a nurse, I was obliged to begin at the scale they paid her when she entered the service. I think, however, that I succeeded in impressing upon them that the professional anesthetist is superior to the nurse anesthetist.

I am happy to be here, and offer my sincere good wishes for your continued success in the marvelous accomplishment, your recognition as a Section of the Indiana State Medical Association.

G. M. ROSENHEIMER, M.D. (South Bend) : I wonder if Dr. Mueller would discuss the incidence of post-operative pneumonia, either in her work or that of men who use this type of anesthesia.

M. M. PIPER, M.D. (Rochester) : It is up to the younger men to take the bull by the horns, and probably that holds true with us as anesthetists. With reference to Dr. Schwartz' paper, there are some of us who give anesthesia on the side. We have a hospital of fourteen beds in which we started using avertin in 1930, just after it was introduced. Possibly we might be criticized because we were so anxious to take it up, but the first cases were successful and we have used it almost routinely. At first we gave large doses, but as we went on we came to the point where we used it as a basal anesthesia. We have 300 to 350 operations done every year under avertin as a basal anesthesia with ether. We have used it for every type of case and every age. Rectal inflammation has not been a factor. Just two weeks ago I gave an anesthetic for prostatectomy, in the first stage avertin and in the second stage ether, and the difference was remarkable. The last patient said he did not go to sleep like this before. I am anxious to know if anyone has used it in obstetrics. My own experience has been in cases where we felt any inhalation has been contra-indicated, and it has been very gratifying, and similar to the response Dr. Mueller mentioned in children in orthopedic work.

R. M. KELSEY, M.D. (LaPorte) : I remember hearing someone say, some time ago, in discussing avertin, that there was difficulty in resuscitation. This individual had used very dilute solution of hydrochloric acid intravenously, and claimed remarkable results in bringing patients to. I wonder how that works—what is the physiologic action?

C. H. McCASKEY, M.D. (Indianapolis) : I am only an interloper in this Section, but I have been interested in this anesthesia ever since we began to use it at the hospitals in Indianapolis. Most of my anesthesias are given in the Methodist Hospital. I have used it in otolaryngological problems, and

mostly in tonsillectomies, and I have found that the children do not come down the hall wailing and carrying on, which means a great deal so far as the rest of the patients in the hospital are concerned. We had a couple of the wildest children I have ever seen a few weeks ago. If we had not used avertin their presence in the halls would have been intolerable. It is ideal for mastoid operations, and in fact for any work around the head. There is another factor. These patients with mastoid operations seem to get along better than with plain ether or even gas. They do not require so much sedative following an operation. I have used it in twenty-three cases of sinus surgery, I have used it in submucous resections, and almost all these patients have been very well pleased. Another point is that with ether you cannot get shrinking of the mucosa with cocaine and adrenalin, whereas with avertin you are able to use as much cocaine and adrenalin as when a plain local anesthetic is used. In esophageal or bronchoscopy cases it makes an ideal anesthetic, along with a small amount of local anesthetic, and in many cases you do not have to give a supplementary anesthetic. In children, especially with a foreign body in the bronchus, it is ideal. In a series of nearly 300 cases I have found it to my advantage, and to the patient's advantage, to use avertin when permitted.

About Dr. Schwartz' paper and the problems of anesthesia, I certainly have always tried to be loyal to the professional men who are trained in anesthesia, and I hope the time will come when the recompense to anesthetists will be equal to that of any other type of medical practice.

LILLIAN B. MUELLER, M.D., Indianapolis (closing) : In regard to pulmonary complications, I cannot give any figures from our own work. It is rather a difficult thing to work out. It would mean a tremendous amount of work to go over records. However, I have read the observations of men who feel that the incidence of post-operative pulmonary complications is not any greater with avertin than with ether. Of course we know we have complications sometimes even with local anesthesia. I think it is a matter which is probably due to factors other than the anesthesia. We have used avertin some in obstetrics. I do not have much to do with that field, but I have used it in Caesarian section and it works beautifully. I have seen a few cases in which it was used in the second stage of labor, and those particular cases did not seem to react well—perhaps because they had had other medication. They were a little wild and irrational, and it did not seem to act satisfactorily. I have seen no asphyxia. In our Caesarian cases the babies have all cried promptly. We do not give morphine until the baby has been delivered. I have read about hydrochloric acid, but I have not used it myself, and have had no personal experience with it.

## THE IRRITABLE FEMALE BLADDER AND URETHRA\*

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The female urethra seems to have been considered such an insignificant part of the anatomy that very little attention has been paid to it. Until recently no careful anatomical study had been made of it or the pathological conditions associated with it. During the middle of the last century the conditions which we are to discuss were simply referred to as the irritable bladder. Little interest was shown until Fenwick, in 1896, and LeFur, in 1901, quite fully described simple ulcerative conditions of the bladder. Not until 1914 do we find a renewed interest awakened, when Hunner described the "elusive ulcer" and its symptom complex. From this time on, we find a continued interest in this group of vesical and urethral diseases with macroscopically clear urines.

Bladder symptoms in the female, due to definite clinical entities involving the lower urinary tract, have been misinterpreted so often that only incalculable mistreatment and poor results could ensue. In this group are included several conditions which have a symptom complex of frequency, dysuria, pain in the suprapubic region, and generally are associated with a macroscopically clear urine. Any one, or all of these symptoms, may be the complaint which finally brings the condition to notice. The urine, which may appear to be clear macroscopically, usually shows a few pus cells and numerous red blood cells. Often these women are treated with urinary antiseptics or antispasmodics for long periods without relief. Finally, they are told that they are neurotics and that they had better just forget about it. Nothing could be further from the truth than to call these women neurotics when they have definite pathology which often perplexes the urologist to obtain a satisfactory cure. Many of these women present themselves with these complaints giving a history of having had one or more pelvic operations such as salpingectomy, suspension of the uterus, repair of a cystocele, and so forth, in an attempt to relieve their condition but with no avail.

The group of conditions associated with the symptom complex of frequency, dysuria, pain in the suprapubic region, and clear urine include the following conditions:

- (1) The "elusive ulcer" of Hunner, sometimes known as "submucous fibrosis" or "interstitial cystitis."
- (2) Non-purulent urethritis, sometimes called "cystalgia."
- (4) Urethral diverticula.
- (3) Suburethral abscesses.
- (5) Urethral caruncle.

### ULCER OF HUNNER

Let us first consider the elusive ulcer of Hunner, now commonly called submucous fibrosis or interstitial cystitis. The clinical and pathological picture of this condition is well established. The predominant and constant symptoms of this lesion are the intense frequency and suprapubic pain. Very often these patients, when first seen in the office, give the impression of having been through a great deal of suffering and show the lack of sleep. This is exactly what the patient will volunteer when you are taking her history. She will tell you that the pain occurs at the time of urination and is extremely severe in the suprapubic region when the bladder is only slightly distended beyond its usual capacity of 3 or 4 ounces. This marked diminution in the bladder capacity is a cardinal point in the diagnosis of this condition, especially when associated with macroscopically clear urine. Seldom do we see a gross hematuria which is a result of over-distension and the opening of fissures in the ulcer itself. One should be able to make a diagnosis in these cases without the aid of the cystoscope. If a catheter is inserted into the bladder, the urine which is obtained is clear. As the bladder gradually empties, the pain becomes much more intense when the tip of the catheter touches the bladder wall in the region of the ulcer. Following this observation, one may take a syringe and determine the capacity of the bladder. If the capacity is not over 4 or 5 ounces, and exquisite pain is the result of this procedure, and there is possibly a slight amount of bleeding, the diagnosis can be arrived at correctly in practically all cases of this type. Cystoscopic examination fails to reveal a clear-cut lesion in the bladder in this type of case. The severity of the symptoms is often out of all proportion to the visible extent of the lesion, which is generally confined to the vertex or lateral aspects of the bladder, rarely involving the trigone. The typical cystoscopic picture is that of an area of diffuse inflammation in the midst of which is a stellate scar formation which may show bleeding fissures when the bladder is over-distended. The remainder of the bladder appears normal in all respects. All of these cases show the upper urinary tracts to be negative for pathology.

The majority of evidence at the present time would point to focal infection, usually of the teeth, tonsils and so forth, as etiological factors in this blood-borne infection. Rosenow has contributed considerably to our understanding of the etiology, but Meissner and Bumpus have presented the most conclusive evidence. They have shown that the offending organism is the green-producing streptococcus which harbors about devitalized teeth and has a special affinity for the urinary tract. Experimentally, these green-producing streptococci have been isolated from devitalized teeth and when injected into laboratory animals have produced typical lesions in the urinary tract *only*. Further

\* Presented before the Jefferson County Medical Society at Madison in May, 1935, and before the Wayne-Union County Medical Society at Richmond, September 19, 1935.

from this our knowledge of the etiology is very faulty.

The treatment of this depressing condition has gone through a rapid evolution in the attempt to arrive at some standard procedure which will give satisfactory results. Hunner at first advocated the complete excision of the ulcerated area. This was carried out in a great number of cases in the period between 1913 and 1915. The results reported at that time seemed very favorable but evidently the conclusions drawn were rather premature. In the following years a great many of these patients returned with a recurrence of their symptoms. This type of procedure has been practically wholly discontinued at the present time; the lesion now is attacked in a slightly different manner. Frontz noted that over-distension of bladders under anesthesia in a large percentage of cases gave very definite relief, especially in superficial ulcerations. Bumpus has gone further to apply this same principle to cases of interstitial cystitis. The pressure used was equal to a column of mercury 120 mm. in height. This roughly equals the distension caused by a cystoscope entered in the bladder and the irrigating jar held approximately four feet above the patient. Considerable bleeding may result from fissures opened up throughout the ulcer. The pain attending this procedure is exquisite and it is necessary that it be carried out under a general anesthetic. Since the elasticity of the bladder in the region of the ulcer is markedly diminished, extreme caution should be used in this procedure in order to avoid rupturing the bladder, resulting in extravasation of urine, massive hemorrhage, or peritonitis.

At the time over-distension is carried out, it is usually customary to fulgurate, by means of high frequency current through a cystoscopic electrode, a complete circle about the ulcerated area according to the technic of Bumpus. The ulcerated area is thoroughly fulgurated to destroy all nerve ends. This seems to aid greatly in the relief of pain. Practically the only danger associated with too frequent fulguration is the possibility of necrosis or gangrene of the treated area which may erode through and result in peritonitis and possibly death. At the present time it seems best to combine both over-distension and fulguration in treating these cases. The patient is hospitalized for at least 24 hours, placed under a general anesthetic, and both procedures carried out at the same time. As a precautionary measure it is best, before the patient leaves the table, to instill sterile water in the bladder with a syringe, measuring the amount of fluid going in and that coming out. This is done merely to assure oneself that there is no rupture or leakage about the treated area. It is usually necessary to carry out these two procedures once or twice yearly. Occasionally the patient may go for two years or longer without requiring further attention. In between these periods of hospitalization, it is best

to have the patient return to the office for a less severe type of bladder distension, which is done by the introduction of a catheter into the bladder and the forcing of fluid into it with a syringe until the patient complains quite severely.

Numerous attempts have been made to produce autogenous vaccines and similar products, but they seem to be without much success. Furthermore, the teeth should be carefully x-rayed and studied by one qualified to pass upon them from the standpoint of eliminating them as a possible focus of infection producing the elusive ulcer.

Patients who have obtained a complete eradication of all dental infections find as a rule that although they are not completely cured, relief is obtained henceforth with a less severe type of treatment. One may see from this that we still have not achieved the ideal, the treatment being largely palliative at the present time. My personal belief in this matter is that this type of infection will ultimately be treated entirely by the eradication of the offending organisms plus some type of specific vaccine.

The conditions known as granular urethritis, cystitis cystica, stricture of the urethra, vesical neck irritation, or vesical neck polypi, grossly simulate symptoms of elusive ulcer except that they lack intense suprapubic pain associated with over-distension. Seldom do they have a true nocturia. Our understanding of this neglected group has been aroused by A. I. Folsom<sup>1</sup> in his article in *The Journal of the American Medical Association*. This work has given us our first clear-cut anatomical description of the female urethra. He has shown us that the proximal third of the urethra in the female very closely simulates in structure the posterior urethra in the male. Namely, the mucosa lining it is very closely identical with the bladder mucosa. Secondly, that numerous crypts or gland-like structures are also found which empty into it. Thirdly, there is a certain amount of erectile tissue deep within the walls of the urethra. The most important point to be considered in understanding the etiology of these conditions is the presence of a low grade chronic infection which may be harbored in these glands or crypts. We must remember that the female urethra is comparatively short and is being constantly bathed with fecal and leukorrheal contamination, which may invade these glands and submucosal tissue, setting up a chronic inflammatory process. These facts account for the fact that we see apparent cases of pyelitis much more often in female children than in male. Often, upon an investigation of these cases, we find the bladder urine loaded with pus and individual kidney specimens are free from pus and are negative on culture. Following cystoscopy these children are often markedly improved, probably due to irrigation of the bladder and dilatation of

<sup>1</sup> Folsom, A. I.: Female Urethra (Clinical and Pathological Study). *Jour. A. M. A.*, Vol. 97, pp. 1345-1351, Nov. 7, 1931.

a tight urethra. These are obviously ascending infections and are closely allied to such conditions as found in the adult. It has often been noticed in adult cases that simply vaginal douches, some type of mild antiseptic resulting in a thorough continuous cleansing of these parts, will often result in complete alleviation of the attending symptoms. Often this routine is not instituted until the infection has become too deep-seated. In such a case, we have the attending conditions which we are to discuss.

The group of conditions which includes granular urethritis, cystitis cystica, and polypi of the urethra may be said to have the same etiology therefore, differing from each other only in their pathological picture. The symptoms in each of these cases are practically identical. The patient complains of frequency, slight burning and pain on urination, especially during the day. Very seldom do these patients have a nocturia of over once nightly. Many of these patients, for want of a more plausible explanation, have been told that the uterus is pressing upon the bladder, thereby causing the irritation. Such a statement may be correct in a small percentage of cases, but we know it is normal for the fundus of the uterus to rest upon the dome of the bladder and to rise as the bladder fills. Also it is to be remembered that the dome of the bladder is a silent area and would only give symptoms when there is a direct extension of some process. Cystoceles also have come in for their share of blame as being the cause of this condition, and have likewise been repaired with no attending relief.

In examining patients with these symptoms it is always important to know the caliber of the urethra. The normal female urethra should admit a 30-F or 32-F straight sound without difficulty. Anything below a 24-F sound may be classed as a stricture. In certain of these cases simple dilatation often gives definite alleviation. This is true in those patients who have a simple stricture of the urethra and who are complaining of slight frequency and a sense of pressure, especially when the patient is on her feet.

Stricture of the urethra generally occurs in the distal one-half or two-thirds while rare cases show a sclerotic contracture at the vesical neck, probably due to an old chronic inflammatory process. Rarely is this sclerotic condition sufficient to require surgical removal. Eminent gynecologists have stated that women with vague pelvic pains, occasionally radiating to either flank, who have been thoroughly examined and in whom no demonstrable pathology is found, often obtain very definite relief simply with dilatations of the urethra.

Our next step in the examination is to catheterize the patient. As we have said before, if the urine is macroscopically clear, the chances are that we are dealing with one of these conditions under discussion. We are now ready to examine the

patient cystoscopically. We have already suspected the type of pathology to be encountered and we generally choose some type of cystoscope which gives the fullest view of the complete urethra, preferably the McCarthy panendoscope or a Buerger Universal cystoscope. The interior of the bladder, of course, is routinely examined and the cystoscope is then withdrawn to the area where the lesion is suspected. At the vesical neck we frequently note a collarette formation of pale cysts around the orifice extending over the adjoining portion of the trigone. The cysts closely resemble a bullous edema, probably due to a low-grade inflammation which has extended upward along the urethra from the exterior. If we do not see the cysts here we may withdraw the cystoscope further into the urethra and note numerous papilli or polyps waving in the irrigating fluid which we used to distend the urethra. If either of the two previously mentioned conditions is not present, we may instead note a chronic granular urethritis in the posterior one-third of the urethra. During the course of this examination we might also note whether there are any definite pockets or diverticuli of the urethra. These may often be demonstrated when one places a finger in the vagina while viewing the urethra, in which case small quantities of pus often may be expressed from them. Abscesses of the urethral wall appear as small protrusions into the urethra and can usually be felt between the cystoscope and the finger in the vagina. Since there is no clear-cut classification for the aforesaid conditions, there is no hard-and-fast way in which they are treated. Definite relief may be afforded, nevertheless, if the pathological processes noted on examination are treated as each demands. Once the original diagnosis is made and the probable source of infection is determined, we should ascertain at this time the extent of this infection and the advisability of the type of treatment to be instituted. Although we often think of a good many of these infections as being possibly gonorrhreal in origin, statistics in this instance fail to show that such is the case. It is probable that the infection in some cases may be secondary to an old gonorrhreal infection as is the case of a large percentage of prostatitis in the male. Therefore, we should make a careful examination for the presence of a Bartholinitis, infection of Skene's glands, or an old endocervicitis which in itself is probably due in the larger percentage of cases to an old laceration or similar injury attendant upon childbirth. Upon the discovery of any of these sources of infection, prompt steps should be made to eradicate them.

The next question is the treatment of the specific pathology occurring in the urethra. The simplest type of treatment, of course, is dilatation of the urethra. The percentage of cases to which this simple procedure will give relief is surprising. Next, we may simply try topical application of silver nitrate, varying its strength from 5% to

20%, to the affected parts. This, in about 90% of the cases, will give the desired relief. In the more persistent cases, we may place the patient either under a local or a gas-oxygen anesthetic and destroy the small cystic or polypoid formations about the vesical neck with a high frequency current through a cystoscopic electrode. Usually one treatment is not sufficient to eradicate the condition. It may have been completely destroyed by means of the high frequency current but, following this, usually a greater or lesser number of topical applications of silver nitrate are necessary for complete recovery.

Although the symptoms may be relieved without treatment of the etiological factors, the patient will invariably return within a year or two with a very similar picture.

A brief mention of urethral caruncle might be made at this point. It is the most frequent tumor of the female urethra, is commonest in the fifth decade, and is rarely seen in a patient under 20 years of age. It is found both in married and unmarried women, nullipara and multipara; it is unrelated to gonorrhea or previous infection. Its presence is often noted because it may give rise to symptoms altogether out of proportion to its apparent insignificance. It usually protrudes from the posterior lip of the meatus as a raspberry-like tumor, moist, dark and firmly attached or freely movable as if on a pedicle. It usually bleeds slightly when touched, is exquisitely tender, and causes a good deal of pain upon urination. If the patient is married, vaginismus may be marked and intercourse unbearable. Burning and dysuria are common to the milder type and may have been present many years before aid is sought. Glandular structure of many caruncles suggests the glands of Skene as an important factor in their formation. Firm, immovable growths may be destroyed by a fine pointed electrode fulgurating down as far as their base. Pedunculated tumors may be grasped with an Allis forcep, excised, the base fulgurated, and if necessary, one or two hemostatic sutures taken.

It is hoped that from this rather superficial discussion of these benign lesions of the lower urinary tract we have shown that these patients are sincere in their complaints, and we, as physicians, should make at least an honest effort to relieve them upon some rational ground.  
801 HEYBURN BLDG.

JOIN YOUR FRIENDS  
IN INDIANAPOLIS  
APRIL 6-11, 1936, FOR  
THE I. S. M. A. AND I. U.  
POSTGRADUATE COURSES  
TURN TO PAGES 194, 195

## CONSERVATIVE VERSUS RADICAL PELVIC SURGERY\*

PAUL BEARD, M.D.  
INDIANAPOLIS

This subject might well include many pathological conditions, but only the more common will be given reference.

Up to fairly recent years at least one part of pelvic surgery was what we now accept as being radical. I refer to the immediate operation for acute salpingitis. It gradually became recognized through clinical observation and bacteriological study that by far the majority of cases of acute salpingitis will progress to a clinical and symptomatic cure if treated conservatively. By taking into consideration the unnecessary surgery, and the mortality and morbidity from immediate operation, it is apparent that definite progress was made.

### GONORRHEAL SALPINGITIS

Gonorrhreal salpingitis approximately amounts to 70% to 80% of all cases of salpingitis. It is the opinion of one well known surgeon, whose work has been accepted as authoritative, that it is seldom possible to recover the gonococcus longer than two weeks after the subsidence of fever and leukocytosis. From clinical observation it was further noted that these cases of acute gonorrhreal salpingitis progressed to clinical relief in the vast majority of cases; however, pathologically the affected tubes do not regain their normal state, although reports of patients following an attack of acute gonorrhreal salpingitis becoming pregnant have been made.

So it is seen that the majority of cases of acute salpingitis following an initial attack need not be operated for the infection itself, and in those that operation becomes necessary, it is the sequelae that make it imperative. It has been estimated that approximately 85% of patients with acute salpingitis go on to practically complete clinical recovery without operation.

Some excellent reports have been made of the results of treatment by various methods and it is possible that the number of cases not needing operation will be further increased.

Surgery is made necessary following salpingitis by the results of the infection. Among the indications for operation may be given: adhesions with symptoms, uterine bleeding (usually due to involvement of the ovaries), painful retrodisplacement of the uterus, persistent tubo-ovarian abscesses, and massive lesions.

Gonorrhreal salpingitis is commonly quoted as forming 70% to 80% of the total, streptococcal infections as 10%, and tuberculosis at approxi-

\* Read before the Section on Surgery of the Indiana State Medical Association, October 9, 1935, at the Gary session.

mately 5% with the bacillus coli, staphylococcus and mixed infections forming a small part of the entire number.

In streptococcal infections, namely the post-abortive type, the bacteria have been found to remain viable for months and operation must be postponed because of this persistence. Too hasty surgery may result in high morbidity, or even fatal termination. The streptococcus has been found to be the quite constant organism with pelvic thrombo-phlebitis and lymphangitis as part of the immediate picture. Matting and fixation of tissues, adhesions, and salpingitis and oophoritis are common findings.

More radical surgery may be necessary following this type of infection than in gonorrhreal salpingitis due to its severity in the invasion of tissues.

In cases of tuberculous salpingitis, in general, complete surgery is necessary with the removal of the uterus. However, the pathological picture often so closely resembles usual cases of salpingitis that it may only be in the laboratory that the true diagnosis is disclosed.

Uterine fibroids may give rise to controversy as to whether they should be handled by conservative or operative methods. Fibroids practically always benign, may be small and so located in the uterus as not to give symptoms and may be found on routine examination. Fibroids of this nature need not be removed, especially if the patient be made to understand her condition and re-examinations are made at proper intervals for sign of growth. Large fibroids, or small ones definitely causing symptoms, give cause for energetic care.

Pelvic endometriosis may present itself as a perplexing problem both from a diagnostic standpoint and at the operating table. At times it is with difficulty differentiated from salpingitis and the proper care is often the reverse. Many of the patients with this condition are young and the decision as to removal of ovaries will depend upon the extent of the process and its involvement. When isolated and not extensive, involvement of structures are present and the ovaries not affected, conservatism may be practiced. However, where the lesions are located at an anatomical critical point, the removal of the ovarian influence will cause a recession of growth in most instances.

#### REPEAT SURGERY

Re-operation in pelvic surgery is very common, so much so that the re-opened abdomen presents to the surgeon an almost constant picture. In practically no other place of disease in the abdomen do we find such frequent cause for such justly needed repeat surgery.

In a recent communication, Dr. Arthur H. Curtis, Chicago, estimated that approximately 30% of his operations are performed as reoperations. This percentage may be higher than with many of us in a less specialized practice; however, it

serves to emphasize the future of quite a number of the first operated patients.

In recent years there has been a distinct tendency toward conservatism in this surgery, and rightly so; however, I believe, as is borne out by the number of reoperations, that certain conservative surgery is not always conservative, but at times proves to be most radical. The unnecessary removal of vital, normal tissue is unwarranted, but I also believe that it is not good surgery to allow diseased tissues or a condition to remain behind that will cause ill health, or is apt to make necessary the performance of a repeat operation.

The picture presented upon opening an abdomen the second or even third time, as may be necessary, is fairly constant. The cystic, degenerative, fibrotic processes in an ovary, adhesions, involving omentum, sigmoid and small bowel, or often a bleeding entire uterus, retrodisplaced with resected tubes, are common findings to all surgeons.

The following discussion concerns some of the conditions or procedures that may be responsible for reoperation or failure to give relief.

The continued well being of a normal, functioning ovary is to a great extent dependent upon its blood supply. Ovaries, following a supravaginal hysterectomy, that are brought and sutured to the stump of the cervix, are removed from their normal resting place and consequently may have their nutrition endangered. The ultimate fate of an ovary following a same sided salpingectomy is in question even in the most expert hands, as the uterine branch of the uterine-ovarian anastomosis may be lost. This is especially true in the presence of appreciable inflammatory involvement of the tube. The value of leaving a normal tube with the ovary is recognized.

Small simple cysts of the ovary (follicular or corpus luteum) may be left undisturbed. It is possible that ovarian cysts of pathological size may so interfere by pressure on the remaining small portion of apparently normal structure as to account for a disturbed function.

Resection of ovaries for cysts of sufficient size as to be considered pathological will, in my opinion, tend to give further trouble. Desire for children, or age of the patient, may alter your judgment as to whether an ovary is to be resected or removed.

It appears that any operative procedure on an ovary, or change from a normal position may result in disturbed nutrition and predispose to degenerative changes and altered function.

At reoperation it is common to find that bilateral salpingectomy had been done with preservation of the entire uterus. The uterus in many instances, where bilateral salpingectomy was done for inflammatory disease, has been carried to a degree of retrodisplacement. This uterus left behind is often found to be the immediate site of abnormal menstruation and although the uterus may possess a certain endocrine bearing, the value of its entire

preservation is outweighed by the number of reoperations found necessary.

In considering the conditions that often result in failure to relieve, I mention the retrodisplacement operation. The various retrodisplacement operations have been used to remedy many ills. Suspension has been misused to correct the sagging bladder or cystocele, and rectocele. Symptoms ascribable to cystocele with urethrocele and rectocele are relieved only by plastic repair of the defective fascial structures. Abnormal position of the uterus in some degree is quoted to be present in the frequency of one out of six of all women. In many women it is symptomless. When it is the site of trouble, it is commonly the associated pathology that is at fault. In reference to backache, not above the level of the lower lumbar vertebrae, with a replacable uterus, if a retrodisplacement pessary is inserted and the uterus held upright for a suitable length of time with relief, good operative result may be expected. The retrodisplaced uterus may become boggy, and the tendency of the ovaries in their prolapsed position to become edematous and congested may account for abnormal menstruation. The finding of a retrodisplaced uterus in common with many cases of endometriosis may well be considered a pertinent factor in the production of implants.

In conclusion, I have assembled certain conditions and factors which pertain to conservative and radical pelvic surgery, mainly for the purpose of focusing your attention upon the high percentage of our patients that come to reoperation.

#### DISCUSSION

GEORGE A. COLLETT, M.D., Crawfordsville: I do not know of any situation that requires more judgment in deciding what to do than in these cases where pelvic surgery is indicated. The question of childbearing and the age of the patient are both factors that one has to consider in deciding how radical to be.

There is one point I would like to emphasize. The only way we can come to any good conclusion is to keep a close follow-up of our patients. If we will for a number of years follow up our patients after they leave the hospital and study the end results, we will then have something very valuable from which to draw our conclusions. I do not think there is anything that will be of more value to us than to watch and study our end results.

#### INDIANAPOLIS —

APRIL 6-11, 1936!

## ABSTRACTS

### ARTIFICIAL FEVER THERAPY OF SYPHILIS

WALTER M. SIMPSON, Dayton, Ohio (*Journal A. M. A.*, Dec. 28, 1935), points out that the value of artificially induced fever therapy as an adjunct to chemotherapy in the management of neurosyphilis is now firmly established. The one factor common to the wide variety of infectious, chemical and physical methods that have yielded comparable therapeutic results is simple fever production. A simplified, controlled and relatively inexpensive method for fever induction and maintenance (Kettering hypertherm) has been devised. High frequency electric currents are not employed. During the last four years, 383 patients have been subjected to 2,844 artificial fever treatments, without any serious ill effects related to the method of treatment. The frequent observation that the best results occurred when neurosyphilis was treated by combined fever and chemotherapy during its earliest manifestations led the author to apply the treatment to patients with primary or early secondary syphilis. The results provide evidence that fever therapy may be of great value in early syphilis, particularly when chemotherapy alone appears to be inadequate. The results obtained in the treatment of symptomatic neurosyphilis, asymptomatic neurosyphilis and resistant seropositive syphilis are at least comparable to the results obtained with the more hazardous, time consuming and inconstant malaria therapy. Hospitalization is not a requirement for fever therapy by physical means. The advent of simple and safe methods for the production of artificial fever should stimulate vigorous investigation of the possibility that the time, effort and expense involved in the adequate antisyphilitic therapy may be greatly lessened. There is evidence that artificial fever therapy fortifies and intensifies the action of antisyphilitic chemotherapeutic agents. It would appear that the therapeutic armamentarium of the syphilologist is now provided with a new and powerful weapon.

### CONTRIBUTORY CAUSES OF CORONARY THROMBOSIS

CADIS PHIPPS, Boston (*Journal A. M. A.*, March 7, 1936), presents figures from which he believes it seems possible to foretell attacks of coronary thrombosis in the majority of instances. There is not only the obvious group of patients suffering from angina pectoris or having had a previous occlusion of the coronary artery, comprising about 40 per cent of the total number of cases, but also other signs and symptoms, such as paroxysmal nocturnal dyspnea, which are almost pathognomonic, especially if in combination, and he believes that his estimate of only 17 per cent of the cases giving no history of suggestive signs or symptoms is modest. It is the precipitating causes, however, which he wishes to stress, although he realizes that there are probably many omissions, such as thyroid dyscrasia or sensitivity to tobacco, which perhaps should be considered. The possible untoward effect of digitalis needs no comment; his observations are, in a way, merely statistical corroboration of work previously done by Gilbert and Fenn and others. Recently there was an excellent discussion by Master on the value of a low calory diet in coronary thrombosis. The author has approached this in a different manner, namely, by frequent small feedings (even during the night and early morning hours), in patients suffering from anginal attacks. To his mind, the most important consideration is the infrequency of physical stress (occurring in only 40 per cent of the cases) as a precipitating cause and, conversely, the greater number of attacks occurring during rest.

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APRIL, 1936

**EDITORIALS****TUBERCULOSIS SHOULD BE  
ELIMINATED**

Eighty per cent of pulmonary tuberculosis is curable by medical and surgical means in class A sanatoria if the patient arrives before the disease is too far advanced. When the disease is diagnosed by the stethoscope it is as a rule no longer classified as early tuberculosis. For early diagnosis the x-ray is necessary. An expert diagnostician can visualize tuberculosis in sixty seconds with the fluoroscope. The x-ray is ninety per cent accurate alone. If one could keep but a single method of diagnosis, that should be the x-ray.

The person who is spreading tuberculosis is the individual who is an open case, generally with cavities. The disease does not progress by arithmetical progression but by geometrical—one case may cause ten new ones and those ten may cause one hundred. More cases are diagnosed now, even in the poor way diagnosis in general is done, than there are beds to care for them. It seems entirely unreasonable that there should be a waiting list for hospitals treating tuberculosis. On the contrary, ideally every possible suspect should have the benefit of expert clinical and x-ray diagnosis, and if the disease is discovered, all such people should be isolated at once in appropriate centers where medical or surgical treatments can be given them, and they be made tubercle bacillus-free before returning to live among healthy people. They could be isolated in reservations under government protection if unable to have private care. If educational measures are unsuccessful in impressing

the importance of this on these sick people, the law should isolate them until they are cured. Cases of leprosy since the Middle Ages have been isolated so that now it is no longer a scourge as it was at one time. The human being is the only host of the human type of tuberculosis. Eliminate the human carrier and the disease will be eliminated.

Except in the early case which can be successfully treated by rest and a medical regime, tuberculosis is essentially a surgical disease. Collapse treatment is the ideal method and the manner depends upon the ability to collapse cavities and render the sputum bacillus-free. It has been demonstrated experimentally that it takes at least two years for a tuberculous lesion to heal. Pneumothorax is not successful unless continued for two to five years. By the operation of intrapleural pneumolysis, by means of the thoracoscope, pleural adhesions may be cut and this often renders collapse by air compression successful. Phrenic nerve operations are successful in a few selected cases. Extrapleural paraffin packs are likewise limited in usefulness. Unless these methods will collapse the cavities completely, thoracoplasty is the operation of choice. Many hopeless cases are made well by thoracoplasty.

If the cavity is large when discovered, air collapse should be attempted and if unsuccessful, thoracoplasty should be done as soon as the patient's condition permits. There seems little excuse for patients with chronic tuberculosis taking up beds in an institution that should be filled by early cases having a good chance to be cured. Modern lung surgery is making it possible for them to leave the hospital and for many of them to return to work.

"Hope" is the most important word in the vocabulary for the tuberculous patient. "Cure" has taken the place of the word "treatment" to indicate to the patient that he is not to become a chronic invalid the rest of his life, but that he may become well and active like those about him doing useful work.

It is interesting that many of the finest and most skilled physicians and surgeons doing this type of work are those who have had tuberculosis themselves and have gone through the "cure" medically or surgically. Such a physician or surgeon will have an important insight into the mental make-up of his patient. What a ray of hope must be the patient's when he understands that his physician or surgeon has himself returned to such a useful life after being in a condition as serious or more serious than his own.

We hope that soon no early case of tuberculosis will go undiagnosed, and that facilities will be immediately available for the treatment of every stage of this unnecessary disease.

## THE FUTURE OF THE FOUNDATIONS

The weekly news release of our Bureau of Publicity for January thirteenth suggests the title of this editorial. The Bureau suggests among other things that "If the wealthy foundations that advocate socializing medical practice in the United States would use their energies and funds to solve basic social problems rather than spend their money in an attempt to change the form of medical practice, they would help lower the death rate of the country." That statement is based upon material gathered from a report by Rollo H. Britten, senior statistician, United States Public Health Service, concerning definite relationships between bad housing and unsanitary environment and disease.

The release proceeds to establish a definite relationship between these existing things, making the statement that one-third of our population lives in structures totally unfit for human habitation. It is beyond question that in our city slum districts illness is much more common than in the less crowded districts. The Federal Government was not slow to recognize this fact in the allocating of funds among the various "alphabetical groups" of current times when better housing has come in for no little consideration by those in authority. The death rate in families living in crowded quarters is shown to be more than two and one-half times that in families accorded the necessary space for sanitary living conditions.

The Bureau's release followed one of similar import entitled "Housing and Health" prepared by Dr. Hugh S. Cumming, retiring Surgeon General, and distributed by the United States Public Health Service. Dr. Cumming says, "Reduction of mortality and sickness rates in the future will rest to a great degree upon extending to the total population the health standards of the more favored groups, one necessity of which is that a sanitary, healthful environment is available."

The release from our Bureau of Publicity concludes by saying, "In the light of the recent studies made by the United States Public Health Service into the relation of environment to disease, it would be helpful if some of the wealthy foundations would turn their attentions to the study of these essential problems . . . ."

All of this brings to memory the closing statement of Mr. Albert Milbank of New York, in addressing our annual Secretaries' Conference in 1935, when he said, "In that spirit (of cooperation) I tender you our assistance and ask for your help." Those who heard the address of Mr. Milbank on that occasion, especially those who had the pleasure of meeting this most estimable gentleman during the day, could not but be impressed with the very earnestness of his remark; succeed-

ing events have conclusively proved that he meant what he said on this occasion. Not only Mr. Milbank, but many others connected with various funds and foundations have since come to "see the light," with the result that the socialized medicine menace, from these quarters, has ceased to be such a serious problem. These folk who are actively connected with these funds and foundations are smart business and professional men, else they would not have accumulated the monies necessary to the creation of these large endowments. The whole trouble, as we now view it, is that the medical profession has too long lived within itself; the very atmosphere of evasiveness (we almost said secrecy) with which the profession has so long been surrounded has proved to be a very embarrassing thing; it is only in recent years that we have been going before the public with our confidences. It is true that we have made great strides in this direction. Today we have strong allies in many quarters that were formerly closed to us, but there is yet a vast amount of work to do.

The physicians of this country are not only the guardians of the public health; our biggest job is the prevention of diseases, and in this we have available a most valuable ally, the United States Public Health Service. It is most unfortunate that Surgeon General Cumming is leaving his post just at this time when the subject of better living conditions is a most active consideration of the public health service, but we have every reason to believe that his successor, a man for many years engaged in health work, will see to it that present plans are not pigeon-holed.

We do not have at hand the figures representing the total net income of all the various foundations, funds, plans, and what-not over the country, but we believe that the expenditure of even one-half of this amount would have a most salutary health effect on our population if expended in the direction of improvement of living conditions among a large per cent of our population. We believe the medical profession could well afford to enter whole-heartedly into such a program.

## "YOUTH MUST BE SERVED!"

We made an observation in the March number of *THE JOURNAL* relative to the large number of younger men in attendance upon the annual Secretaries' Conference, and took occasion to remark that it was a most hopeful sign, this thing of electing younger men to the posts of county society secretaries. Since that Conference, we have been looking over the "official family" of the Association for 1936, and by consulting the American Medical Association directory, we have noted the preponderance of younger men on the various

committees. We congratulate President Sensenich in thus recognizing "youth."

As we have often remarked, we have been familiar with the goings-on of the Indiana State Medical Association for more than three decades. We recall a time, almost a quarter of a century ago, when the "old heads" were in complete control. (The younger men termed them the "amen-corner boys.") These gray-heads determined our policies and saw to it that those policies were duly carried out; they named the officers from year to year, and they would brook no interference with their plans.

Also do we remember when the accounting came, when a younger group took things into their own hands, elected a president not entirely to the liking of the powers-that-were, and proceeded to upset many of the ancient traditions of the Association. It was immediately following this that we were first appointed to an official position, the secretaryship of one of the sections, and it was in this capacity that we discovered the value of having some of the younger men on our programs. Many of those to whom we now listen with the greatest of respect were placed on section programs as experiments, back in the earlier days.

We do not mean that we should forget the older men, if you please, the men who have carried the brunt of the fight in years past; they have done a noble work and their abilities still must be recognized. On the other hand, we must bear in mind that the young men of today are to be our leaders of tomorrow, and they must be trained for this leadership; they can be trained only by working with those of the older group who know their way around.

We welcome the addition of the younger men to our official family; it is our purpose to lend them every aid in establishing themselves as the leaders of Indiana Medicine in the years to come. We would give but one word of advice: do not be too "cocky" over your present position on this or that committee. You were placed there after much consideration on the part of the president of your State Association, and because he had good reason to believe that you would come through in grand style and make a worth-while addition to his "cabinet." Prove to him that his judgment was correct by making an intelligent study of the work assigned you. Next summer, when you are asked to participate in the preparation of your annual committee report, do not be content with letting your chairman frame the report, alone; get into the thick of things and make that report a red-blooded affair.

We repeat, we are for you; the whole State Association is back of you; buckle down to your work and you will have cause for naught but pleasant reflections after your work has been completed.

## "LICK 'EM IN THE PRIMARIES!"

Some forty days after you receive THE JOURNAL for the current month, the primaries will be upon us, an occasion when Indiana voters go to the polls to express their preference for candidates to be voted for in the November elections. We doctors do a lot of talking about what legislators do after they once get into operation in the Indiana legislatures. Sometimes we feel that we do not do enough talking about those who aspire to seats in the biennial sessions of that body. The time to clean house is in the primaries, not in the annual elections.

The great majority of county medical societies have appointed committees to look after this work. Many of these committees are at work and some have by this time arrived at a definite conclusion as to the stand this or that candidate will take on matters pertaining to the medical profession. Only the other day, however, we heard a man say that he was about the only doctor in the whole county who would show any interest in legislative matters. We find that hard to believe, for if this thing is put up to the average doctor in the right way, he will exhibit more interest than one might suppose.

We have had a considerable experience in Indiana politics, but once, on an Indianapolis-bound train, we met a real student of Indiana politics, a man who never had aspired to or held a public office and who never was a member of a county organization, yet a man who told us more about Indiana polities than has ever been printed. From him we learned much.

We asked him, "If four thousand Indiana doctors became possessed of the notion that they wanted something, or did not want something, and this four thousand doctors went out and fought for or against the proposition, what would be the result?" Without a moment's hesitation, the man replied, "Four thousand Indiana doctors can get anything they want, and can stop anything they do not want, in *any* election!" There you are! It is but a matter of organization, and as we have said, your county society no doubt is already organized.

Your county society committee will no doubt soon be sending you a letter carrying full information about your local candidates. Do not let personal politics interfere with your better judgment. Just bear in mind that it is quite possible that your very bread and butter depends upon the make-up of the Indiana legislature in 1937.

We have the greatest of respect for the ability of our Association's Committee on Public Policy and Legislation; they are men of experience and know their way around; they will see to it that all county societies are duly advised as to what is needed, and it is finally put up to *you*. If your local society asks you to do a thing, either general or specific, make that the first order of business and attend to it now.

## EDITORIAL NOTES

Complete programs for the postgraduate courses to be presented by the Indiana State Medical Association (April 8, 9, 1936) and the Indiana University School of Medicine (April 6-11, 1936) are printed on pages 194 and 195 in this issue. These programs have been arranged for your benefit. No fees will be charged. This is a real opportunity for you.

Official call to the officers, fellows, and members of the American Medical Association has been sent for the eighty-seventh annual session, to be held in Kansas City, Missouri, May 11 to May 15, 1936. The House of Delegates will convene on Monday, May 11; the scientific assembly will open on Tuesday, May 12.

Many of the terrible scars of the face, neck and upper extremities of children are due to burns inflicted when their clothing catches fire. It might be well to remember that flames leap upward, and that if the child were held head downward until means of putting the fire out is found, burns of the upper part of the body would not be so likely to occur, and the child would not be so likely to inhale the flames.

It may be early to plan your vacation, but with the respite from the more than a month of sub-zero temperatures prevailing in Indiana, one might well begin checking up on the tackle box, shining up the golf clubs, and looking to the various little details that please the average man. Be it remembered that "the doctor's disease," as the coronary diseases are coming to be known, lurks nigh about, ready to attack the man who looks not unto his health. Plan your vacation now!

Are you planning to attend the Kansas City session of the A.M.A., the week of May eleventh? If so, have you made your hotel reservations? If you are not already a Fellow of the American Medical Association, you will find it profitable to send your seven dollars to 535 North Dearborn Street, Chicago, and receive your membership card before you go to Kansas City. This, of course, means that you will receive THE JOURNAL of the A.M.A., the best medical publication extant, for one year.

A recent bulletin from the Bureau of Medical Economics of the American Medical Association stresses a very important point when it says that we should say less about medical economics and more about the social aspects of illness. Already have too many of the laity gained the impression that when we devote meeting after meeting to "medical economics" we are talking over ways and means to enhance our incomes. The sooner we get down to a safe, sane, and rational discussion of the problems incident to disease, the sooner will we command the proper degree of interest among laymen.

The present session of Congress is going to "high hat" the medical profession, judging from the way they have manhandled and all but emasculated the Copeland Bill which has to do with changes in the food and drug regulations. We had hopes, slight though they were, that some needed changes might be made in the present regulations, but as was pointed out by the American Medical Association Bureau of Legal Medicine, some of the provisions of the amended law are such that "they open the door wide for fraud and danger." How long will the medical profession march to the polls, each two years, and vote for those who have no regard for public health?

Are you aware that in these United States there are approximately 100,000 "first admissions" into the various mental hospitals? The question has been asked as to what we are doing to care for these potential victims. Dementia praecox stands ready to claim the greatest percentage of victims, and it apparently is squarely up to the medical profession to do something about it. To us, the saddest part of the picture is the fact that so many of our young folks are victims. Only a little while ago we saw a young woman whom we had known as an active, normal girl, removed to one of our state hospitals. The depression years have taken many tolls, not the least of which is an increase in mental unbalance.

A good old family doctor who went to his reward the other day had never used an automobile, but held loyally to the faithful horse and buggy. Perhaps he was antiquated, but as he jogged along, he had time to give thought to his medical problems as he could not do if he were roaring away at sixty or sixty-five. A country doctor recently remarked: "I am not as good a doctor as I was in the horse and buggy days. Then, I had time to think of my last patient before getting to the next. Now sometimes I slow my car down to fifteen or twenty miles, trying to think, and, damme, I am forced off the road or honked at by others until I get mad. Then I drive like hell, just like the rest."—*New York State Jour. of Med.*, Dec. 1, 1935.

On May 12, 1820, Florence Nightingale, patron saint of nurses, was born; one hundred and one years later, Editor Foley, of *Hospital Management*, inaugurated National Hospital Day, which has since come to be generally observed throughout the land. The primary purpose of the occasion seems to be the better acquainting of the public with our hospitals and to that end these institutions observe "open house" during the day. Visitors are encouraged to come and inspect their local hospitals, being escorted through them by nurses, attendants, and in some places by members of the medical and surgical staff. These institutions have come to be a very important part of our daily life. The modern hospital is looked upon as a haven for those in physical and bodily distress. That a day is set apart for them is but proper, and we urge our members to take due notice of the occasion and lend every possible assistance to the proper observance of Hospital Day.

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A few of our hospitals over the state are making serious inquiry into the matter of pre-paid hospital insurance, along the lines of the plan now operating in Cleveland. We are advised that the matter is under consideration in at least three of our larger cities. Recently a report was given in a local county medical society meeting, by a member who had accompanied a committee to Cleveland, there to make a first-hand survey of the situation. This member stated that he had contacted a Cleveland physician, a high official of the A.M.A., who was very enthusiastic about the plan as it now operates in that city. Considerable "alarm" is being sounded on this subject by some of our officials, but (as one of our societies expressed it) if this thing is in the offing, then it will be the wise thing to get in at the head of the procession and control it, rather than to tag along after the thing is in operation. We express no personal opinion in the matter; we simply bring it up because it is a live issue in some of our cities—an issue that demands our very careful study.

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The antics of some of the members of the Indiana legislature have been amusing—especially those who sought certain "reforms" in the Indiana liquor law at the recent special session, these "reforms" having chiefly to do with Sunday closing hours. Liberal though we are, we can not refrain from wondering what it is all about, and why these fellows should be so short-sighted? But a few years removed from prohibition, a condition brought about in the main by the brewery and distillery interests, yet we find folks who seek "liberalization." Indiana, long before prohibition, was

classed as a dry state; before that time it operated for many years under a local option clause. Outside the large centers, Indiana was regarded as a "dry" state; travelling from Chicago to Indianapolis, after one left Lake county, he did not hit a "wet" county until he reached the limits of Marion county, a considerable stretch of territory. "Give 'em an inch and they want a mile" might well be applied to these gentry who seemingly are never satisfied.

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We urge our members to consider most carefully the records of members of the Indiana legislature, as reflected by their activities during the special session, especially in regard to bills introduced having to do with medical legislation. This session was called for the special consideration of legislation regarding the Federal Social Security Act, but it is noted that many members took occasion to introduce various pet measures. Most members of the legislature seem to like the job, and want to be renominated; for this reason it will be worth while for our members to look into the records of those at present in the Indiana House of Representatives and the Senate, and we especially recommend this procedure to members of county medical society legislative committees. Also, the attention of the entire membership is directed to the importance of being informed as to the status of candidates in the May primary; your local committee should see to it that you are properly advised in the matter, and if they do not, then it becomes your duty to make a personal investigation. There is little excuse for having a single member of the 1937 legislature openly opposed to Indiana medicine.

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Once more the question is asked, "When does county medical society membership begin?" The logical answer, of course, is that membership begins when a man has been duly elected and has paid the prescribed annual dues. This problem arose at a recent meeting of the Executive Committee in the course of the discussion of a case in which a member had paid the secretary the annual dues but, for one reason or another, the secretary had failed to report the transaction to headquarters. As we recall it, a legal opinion has been expressed to the effect that membership begins on and after the date that the headquarters office receives the state dues. While this may seem perfectly proper, legally, yet it works an unnecessary hardship upon the member who is the unwitting victim of a careless secretary. We are of the opinion that the payment of annual dues to a reg-

ularly elected county society secretary should then and there establish membership in the State Association, for is not the local secretary acting as the agent of the State Association in handling the transaction? True it is that the official county society receipt declares that membership begins upon receipt of the State dues at headquarters, but we believe this is wrong, ethically and in principle. It is to be hoped that steps will be taken to clear the muddle by appropriate action in the House of Delegates at South Bend.

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*Don't forget the postgraduate week in  
Indianapolis, April 6-11, 1936.*

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Much has been said and written about that under-appreciated official, the county medical society secretary. He is pitied as an over-worked and much-abused official, but from the way some of them hang on to the jobs, one might well believe that they like that sort of thing. Most of them do like it; they like the routine duties of the office, such as the arranging of meetings and of programs. However, they do not like this thing of trying to collect delinquent dues. Just what does it mean to have dues straggling in over a period of twelve months? Yes, we meant to say a period of twelve months! A belated check comes to hand; we write the local receipt, giving the member proper credit on our membership rolls; we write a check for the headquarters office; two or three days later, the State Association membership card is returned to us, then it is mailed to the member. The point is that if all members paid at the first of the year, say before January fifteenth, one check to headquarters would close the transaction, an hour or two of spare time could be devoted to mailing the Association membership cards to members, and the job would be done, leaving many hours of future time which the secretary could devote to other society duties. We recommend that each county society "close its doors" not later than June first of each year. Delinquency in the State Association begins February first; THE JOURNAL ceases its monthly visits to those who have not paid up by June first. County medical society secretaries should not have to be bothered by dues matters after that date. In almost every instance there is absolutely no good excuse for such delay, and by the same sign there are dozens of reasons why we should not have nine hundred or a thousand of our members on the delinquent list on the first day of each February. Not only does this work a hardship on the lowly county secretary, but the headquarters staff is pretty much out of tune until such time as most dues are in; if headquarters had the dues matter out of their way by February first, what a difference it would make in efficiency and work performed!

Last month we called attention to the misinterpretation that was placed upon a physician's use of an electrocardiograph, an observer thinking that it was an apparatus for diagnosing all ills and spreading that information to his community, to the embarrassment of the physician. This month we call attention to a different sort of misinterpretation, perhaps deliberate misinterpretation. A short time ago, our president-elect, Dr. E. D. Clark, of Indianapolis, and our executive secretary, Thomas A. Hendricks, went to Economy, Indiana, to determine for themselves the state of affairs in regard to the cooperative plan for medical care proposed for that community by a student from DePauw University and the town's minister. A few days after their visit, newspapers were supplied with an item which said, among other things, that, "The plan, approved by Dr. Ed Clark, president of the Indiana Medical Association and legally sanctioned, provides . . ." This, of course, was not the truth, but it caused a great deal of comment, and Dr. Clark immediately wrote letters for publication to the Indianapolis *Star* and to the Richmond *Palladium*, enclosing a copy of a letter sent to the minister, Rev. W. T. Briggs, of Economy, Indiana. The letter to Reverend Briggs follows:

March 16, 1936.

My dear Reverend Briggs:

It is exceedingly unfortunate that an incorrect statement as to my position in regard to the Economy sickness plan has appeared in the press of the state.

The statement that appeared in the March 16 issue of the Indianapolis *Star* that I, as president of the Indiana State Medical Association, have approved the plan is absolutely incorrect. In the first place, I am not president of the Association but merely president-elect, and, in the second place, I did not give approval nor in any way intimate that I did approve of this plan at the time I visited Economy. Quite to the contrary during my conference with you and the Economy citizens I urged caution, complete and mature consideration of the plan proposed, and suggested that you submit a copy of the Economy plan and the contract for study, comments and criticisms to R. G. Leland, M.D., director of the Bureau of Medical Economics of the American Medical Association, an authority on sickness prepayment plans.

I hold you responsible to see that a correction of the statement which appeared in the press is made immediately.

I am sending a copy of this letter to the Indianapolis *Star*, the Richmond *Palladium*, and the Indianapolis manager of the Associated Press.

Yours sincerely,

E. D. CLARK, President-elect.

## PRESIDENT'S PAGE

### EDUCATION — INDOCTRINATION — BUREAUCRACY?

At the meeting of the National Education Association in 1935, the advocates of education for a new social order are reported to have taken the position that "Teachers should deliberately reach for power and then make the most of it," and work boldly and without ceasing for a new social order. If this is academic freedom, as demanded by some educators, then those who believe social evolution is accomplished in a safer way than through indoctrination by impractical and inexperienced teachers should turn to that inherent freedom of society to conduct an academic housecleaning. Moreover, authorities of a university recently under investigation because of alleged subversive teaching made the statement that "Propaganda is not teaching, and we should certainly feel that a professor who indulged in it had given evidence that he did not belong in the university."

The distinction between teaching and propaganda seems not to be recognized by faculties, in the departments of sociology and economics in certain universities, who not only are active in the promulgation of revolutionary social legislation but publicly advocate sickness insurance. Academic freedom in the minds of these individuals seems to be all inclusive, not only as to freedom of propaganda but even to the extent of giving qualification to propaganda concerning subjects in which the individual has had no training or experience—notably such a highly specialized subject as medicine. Students in the same universities are required to spend a minimum of six years to fit themselves for the practice of medicine. Obviously the methods of distribution by insurance or other plans of such a distinctly personal service as the care of the sick cannot be considered apart from the individual and the problems of that service. The "reaching for power" has been very much in evidence in the framework for bureaucracy built into legislation, said to have been prepared in the same sociologic sources.

The medical profession is interested to a greater degree than lay groups in seeing that adequate medical service shall be available to everyone. No objection has been made to extension of assistance to crippled children, the blind, and others in need, provided the bad effects of the methods employed do not outweigh the benefits. The assumption, however, that the medically untrained sociologist or social service worker is capable of properly planning or directing a program encompassing specifically medical problems is not well founded. The statement of Dr. Conant, president of Harvard University, is to the point: "Modern medicine is, in fact, less than a hundred years old, but the social

sciences are less than half of that. Assuming that they are in the experimental stage through which medical science has passed, valuable service to society may, in time, be expected of them. But that reasonable expectation is hardly warrant for delivering the body politic today into the hands of even the most conscientious social service practitioners."

Harvard is not the only university which has recently gone on record concerning the character of irresponsible propagandism emanating from the departments of sociology and economics in certain universities. Other educators and institutions are taking steps to correct this situation in which students being educated for citizenship are being subjected to constant indoctrination. Nor is this a problem only of the medical profession, but it means heavy tax responsibilities not only on the part of those to whom various social experiments are directed but upon every taxpaying citizen. Citizens may well be interested as to who shall do the planning and to what degree they shall plan the individual's life.

It would seem that the universities would themselves recognize the harm reflected upon their institutions by ill advised activities of their teachers. It must be admitted that the university does not carry on its educational activities in a vacuum of insulation from the society in which it operates, and that it is inconceivable that it can always correctly guess the trend of the social forces which surround it. It would seem even greater folly to permit any of its teachers to interpret its attitude toward far-reaching social questions and compromise it still further by propagandism. Educators of broad vision hold that the final purpose of education is not to teach people doctrines, but that education should teach students to think for themselves and by presenting facts upon both sides of a question it may prepare them to assist or accept change as it comes. Change should not be on the basis of coercion. Indoctrination should go no further than a belief in liberty, and under it those things which in common agreement furnish the basis upon which the social structure rests.

It must be admitted that in the end society will have the kind of education which it wishes, and that propaganda unacceptable to it always awakens increased vigilance, demands for oaths of allegiance, dismissal of certain teachers, and various restrictive measures. Loss of public confidence and financial support are fatal to the university.

*R. L. Dennerich*

## ANNUAL POSTGRADUATE COURSE INDIANA STATE MEDICAL ASSOCIATION

**APRIL 8 AND 9, 1936**

in the

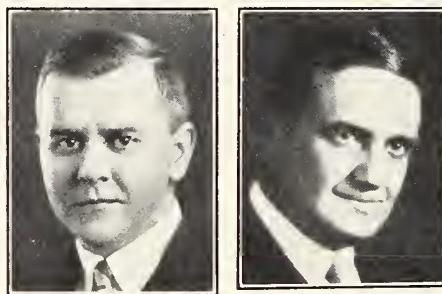
**RILEY ROOM, CLAYPOOL HOTEL, INDIANAPOLIS**

**WEDNESDAY  
APRIL 8**

1:30 to 3:00 p. m.

DR. GATEWOOD, Associate Clinical Professor of Surgery, Rush Medical School, Chicago.

Subject:  
"Malignant Tumors of the Stomach and of the Bowel"



*Dr. Gatewood*

*W. W. Hamburger*

3:00 to 3:30 p. m.

Recess

3:30 to 5:00 p. m.

CHARLES CHRISTIAN WOLFERTH, M.D., Professor of Medicine, University of Pennsylvania, Philadelphia.

Clinic on Heart Disease

Evening:

CHARLES WOLFERTH, M.D.

Subject:

"Observations on the Mechanism and Clinical Interpretation of Heart Sounds."

**COMMITTEE ON GRADUATE EDUCATION**

C. J. Clark, M.D., Indianapolis,  
Chairman

B. G. Keeney, Shelbyville  
Robert Moore, Indianapolis  
Herman Baker, Evansville  
W. W. Holmes, Logansport  
J. T. Oliphant, Farmersburg  
Paul A. Garber, South Whitley  
R. H. Beeson, Muncie  
W. C. Wright, Fort Wayne  
W. D. Gatch, Indianapolis, ex-officio.

Subject:

"Heart Diseases."

3:00 to 3:30 p. m.

Recess

3:30 to 5:00 p. m.

DEAN LEWIS, M.D., Professor of Surgery, Johns Hopkins University, Baltimore, Maryland.

Clinic on Neoplastic Diseases

Evening:

DEAN LEWIS, M.D.

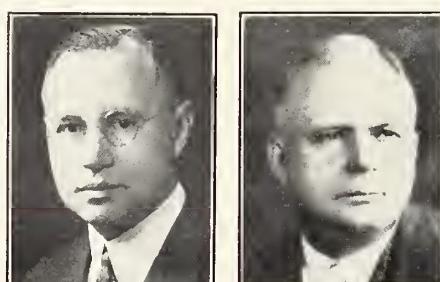
Subject:

"Neoplastic Diseases."

WALTER W. HAMBURGER,  
M.D.

Subject:

"Coronary Disease—Its Pathology, Management, and Outlook."



*Chas. Wolferth*

*Dean Lewis*

**ALL REPUTABLE PHYSICIANS WELCOME — NO REGISTRATION FEE**

## ANNUAL POSTGRADUATE COURSE THE INDIANA UNIVERSITY SCHOOL OF MEDICINE

**APRIL 6-11, 1936**

at the

**INDIANA UNIVERSITY SCHOOL OF MEDICINE**

8:30 to 11:00 a. m., Monday to Saturday, inclusive, will be devoted to clinics, including the subjects Urology, Obstetrics, Pediatrics, Gastrointestinal Diseases, Dermatology, Medicine, Surgery, Eye, Ear, Nose and Throat, Cardiovascular and Renal Diseases, Neoplastic Diseases, Mental and Nervous Diseases, Orthopedics, and Medical Therapeutics.



*Willis Campbell*

11:00 to 12:00 a. m., Monday to Saturday, inclusive, will be devoted to aphorisms, covering many of the foregoing subjects.

1:30 to 3:30 p. m., Monday and Tuesday, April 6 and 7, will be devoted to didactic discussions including the subjects:

- "Toxemias of Pregnancy"
- "Problems of Newborn and Premature Infants"
- "Diagnosis of Bladder Tumors"
- "Head Injuries"
- "Continued Fevers"
- "Benign Lesions"
- "Treatment of Functional Uterine Bleeding."
- "Headache as a Symptom"



*Ralph Major*

3:30 to 5:00 p. m., Monday and Tuesday, April 6 and 7, will be given for clinico-pathological conferences.

WEDNESDAY AND THURSDAY, APRIL 8 AND 9, WILL BE UNDER THE DIRECTION OF THE POSTGRADUATE COMMITTEE OF THE INDIANA STATE MEDICAL ASSOCIATION. SEE PROGRAM ON OPPOSITE PAGE.

1:30 to 3:30 p. m., Friday, April 10, will include didactic discussions on Orthopedics (Fracture of the Lower End of the Radius), Constitutional Medicine, and Surgery (the Gall Bladder), and Recent Advances in Toxicology.

3:30 to 5:00 p. m., Friday, April 10, will be given for clinico-pathological conferences.

#### EVENING LECTURES:

Monday, April 6:

RALPH H. MAJOR, M.D., Kansas City, Missouri, Professor of Medicine, University of Kansas.

Tuesday, April 7:

MAX M. PEET, M.D., Professor of Neurosurgery, University of Michigan.

Subject:

"Indications for Sympathectomy"

#### FRIDAY, APRIL 10:

WILLIS CAMPBELL, M.D., Memphis, Tennessee, Professor of Orthopedic Surgery, University of Tennessee.

**SEE DETAILED PROGRAM ON ADVERTISING PAGE —**

**ALL REPUTABLE PHYSICIANS WELCOME — NO REGISTRATION FEE**

## THE SPECIAL SESSION OF THE PUBLIC HEALTH BILL

VERNE K. HARVEY, M.D.

Director, Indiana State Division of Public Health

Passage of the public health bill by the Special Session of the Indiana General Assembly does not forecast any drastic changes in the state's program of public health work; on the contrary the basic public health laws will remain unchanged and will continue to be those adopted in 1935. The bill, however, does pave the way for a more extensive public health program, along present lines, and makes possible the receipt by Indiana of Federal grants with which to augment the services rendered by the state and local governmental units.

The program provided for in the bill is divided into two general classifications—public health, and child and maternal welfare. To begin with, it should be borne in mind that public health work is concerned with the sick community and not with the sick individual. Public health has nothing whatever to do with medical relief. Another important point is that the whole program, so far as the counties are concerned, is purely optional. Counties that prefer to continue with the present health officer system will not in any way change their relationship to the state health division. The same service will be available to all communities alike as in the past.

One of the principal goals of the Federal program in which Indiana proposes to cooperate is the extension and improvement of service through cooperation between the children's bureau of the U. S. department of labor, the state board of health, and the local units for the promotion of health of mothers and children, especially in rural areas and in areas suffering from severe economic distress, and for the development of demonstration services. This service will be principally educational in nature.

The bill provides for cooperation between the state board of health and the U. S. public health service in a general public health program. This includes the optional establishment in the counties of full-time health officers with a trained and adequate staff. Standards for the employes are to be fixed by the state health department, but the state board must, to comply with the Federal requirements, fix such standards as are approved by the U. S. public health service. Funds will be provided by the Federal government to train workers for local positions.

Under provisions of the bill the state board of health will conduct investigations relating to disease and problems of sanitation, such as community sewage disposal, water supply, protection of milk and food supplies. The establishment of Public Health Nursing programs, and the promo-

tion of more adequate local public health services particularly for rural communities also are to be provided under the program. A complete system of reporting to the public health service and the children's department will be maintained.

Counties that elect to cooperate with the state board and the Federal government in the program will have full-time county health officers, sanitary engineers, public health nurses, and any other assistants necessary to carry out provisions of the program. The county health officers will replace any present health officers in the county.

The cost of such a program will not be much, if any, greater than the present expenditures for public health work for the counties. The additional costs of the new set-up will be met by Federal funds which become available when Indiana starts cooperating in the nation-wide program.

Without additional expenditures by the state, a total of approximately \$123,000 will be granted to Indiana. This sum can be augmented by \$60,000 if the state appropriates a like additional amount for public health work.

The state board of health is authorized by terms of the bill to pay a share of the salaries and expenses of local assistants, investigators, and other employes as shall be agreed upon between the state and the local authorities. Local units of government which may enter into agreements with the state department include counties, cities, towns or health districts.

While some increase in the personnel of the state department will be necessary, it is not the plan to enlarge it simply because the opportunity is afforded. What increases are absolutely necessary to take care of added responsibilities resulting from increased work in local communities will be made. The plan is to spend the bulk of the Federal funds in rural communities that want to take advantage of the funds to increase their facilities and have more adequate public health administration.

The state board of health becomes the administration agency for the act. To permit the board to cooperate with the various departments and bureaus of the Federal government, the state budget committee is authorized by the bill to reallocate the health board's unexpended funds for the biennium ending June 30, 1936, the re-allocation to be made on recommendation of the board. In addition, the sum of \$5,000, or whatever part of that amount is needed, is appropriated for administration for the fiscal year ending June 30, 1936, and \$15,000 for the fiscal year ending June 30, 1937.

## THE INDIANA LEGISLATURE

### LEGISLATIVE COMMITTEE REPORT ON SPECIAL SESSION

Victory, complete and decisive, for the public and the profession, resulted during the special session of the legislature in what was the hottest battle against the cults since the famous fight of 1927 when the injunction clause was written into the Indiana Medical Practice Act. The battle, which was one of the bitterest and in some respects the most important during the entire session, came on the floor of the Senate chamber toward the end of the session about the middle of the month, and well might the ides of March, 1936, go down in Indiana medical records as a significant historic date.

It all came about in this manner. During the opening days of the session and preliminary to the presentation of the Social Security Acts for consideration by the General Assembly, the forces and interests of your legislative committee were directed toward those provisions of the acts having to do with the medical and health phases of the new set-up, energies being turned against those sections which would have centralized all control in a state welfare board that presumably would have been dominated by social service workers. These phases in general were corrected by the special committee of twenty-four legislators who largely redrafted the bills and deleted the centralized control.

These bills, as they came from this legislative committee, which in passing may be praised for its tireless work and constructive efforts, provided that all medical services to the blind, the crippled children, the maternity and child health work, were to be in the hands and under the direction of the members of the regular medical profession.

#### OPENING SKIRMISH

Early the second week in the session, when the Public Health Bill was open for amendments, the following amendment was presented and passed by the Senate without debate:

"Nothing in this Act or any rule or regulation adopted hereunder shall disqualify, prohibit, or discriminate against the appointment, employment or service of any person or persons licensed by the Indiana Board of Medical Registration and Examination within the scope of the license duly issued by such Board to said person or persons."

A moment's study convinced several members of the Senate that this amendment would have thrown open the entire set-up to the sixteen different varieties of cultists who are given a limited license by the Board, and following talks by Senators Floyd Garrott, of Battle Ground, Claude McBride, of Jeffersonville, Thurman Gottschalk, of Berne, and Thomas A. Hendricks, of Indianapolis, the Senate unanimously voted to reconsider its action

by which the offensive amendment had been written into the public health measure. That was that, and it was believed the battle was over, but in reality, it had merely started. The public health bill passed the Senate and word was received soon thereafter that it had passed the House and had been sent merrily on its way to the Governor for signature when the Welfare Bill, having the clauses containing the blind, the crippled children and the maternity and child welfare phases, having passed the House, appeared in the Senate on Thursday, March 12. Believe it or not, there was the same noxious paragraph that had been eliminated from the public health measure, tucked away at the end of the Welfare Bill, appearing as unobtrusively as possible as Paragraph 129½. It had been slipped into the Welfare bill without the many friends of the medical profession in the House knowing that it was there or realizing that it opened wide the gates to the osteopaths and the cultists.

Immediately efforts were made by the osteopathic spokesmen to gain a compromise from your committee, but this was steadfastly refused. The measure was gone over, paragraph by paragraph, in the Senate that day and the attention of the Senate was called to the fact that the same objectionable paragraph that had been eliminated from the health bill was in the Welfare Bill.

FRIDAY, MARCH 13

The Welfare Bill went to second reading in the Senate and was open for amendments on Friday, March 13, which would have proved a most unlucky day for the public and the medical profession of Indiana had not a surprise adjournment of a contentious night session ended any chance for a roll call which might very well have gone against the profession and forced a compromise with the osteopaths. This sudden adjournment upset completely the well-laid plans of the cultists, who had everything set for a big "coup" with their adherent, Senator Jacob Weiss, of Marion County, in the chair, and the Senate chamber jammed with their lobbyists confident of victory. The forced adjournment caught Senator Weiss off guard and left the galleries, which were keyed for a big battle, stunned.

Next morning, Saturday, everything was different. Definite word had come from the Governor that the paragraph in question did not have his support, the leaders of both parties, with the exception of Weiss, all indicated their support of the move to strike out 129½ in its entirety, the profession throughout the state was aroused, and the whole outlook of the situation was more favor-

able though far from certain when the motion to strike out the now famous paragraph 129½ was made.

Well oiled, the machine of the opposition started humming, Senator Weiss stating that, "Senator Hendricks' motion to strike out was not in good form." This caused no embarrassment whatsoever as Lieutenant-Governor Townsend, president of the Senate, immediately ruled that the motion was in perfectly good form. The debate that followed for the next hour brought forth numerous attacks upon the motion which were forcibly and ably answered by Senators Gottschalk, Garrott, Portteus, of Indianapolis, and several others. A standing vote in favor of the motion carried 28 to 18, and 129½ was definitely gone.

Immediately Senator Wade offered an amendment which would have the same effect as 129½ except that it limited its provisions to chiropractors and osteopaths, leaving out naturopaths, etc. This failed, 26-18, on a rising vote. Then came the crucial vote—naming the osteopaths alone. It was presented by Senator Webb. Senator White spoke against the Webb amendment, stating that, "the Indiana medical profession is now taking good care of our crippled children." Senator Gottschalk moved to table the Webb amendment and a roll call was demanded by Senator Webb. The roll call showed 30 ayes and 16 noes, and the Webb motion was tabled. The official roll call follows:

AYES		
Albright	Gottschalk	Sands
Bedwell	Hardy	Schricker
Biddle	Hays	Schuler
Brandon	Hendricks	Smith
Brown	Jenner	Swihart
Carlson	Johnson	Trent
Chambers	Kolsem	Watson, C. K.
Clearay	Lane	Watson, Dale
Dennigan	Portteus	White
Garrott	Robertson	Wickens
NOES		
Anderson		Jernegan
Ferris		Lynch
Fitzgerald		McBride
Handy		Rupert
Harter		Sohl
Hemmer		Wade
Inman		Webb
Janes		Weiss
ABSENT		
Eichhorn		.
Nichols		
Vermillion		

#### A GLIMPSE BEHIND THE SCENES

The Indianapolis *News* gave a most enlightening account of the battle and the forces that were aligned against the public welfare and the profession:

"Passage of the Welfare Bill came quickly after a forenoon spent in amending the bill and in wrangling over a section asserting nothing should discriminate against any of the various groups of practitioners licensed by the Indiana Board of Medical Registration and Examination.

"The section eventually was stricken from the bill. Senator Thomas A. Hendricks, Democrat, Indianapolis, led in the fight to eliminate the section.

"Thomas F. O'Mara, Terre Haute, who was one of those active in the 1935 legislature in drafting the liquor law and in lobby developments at that time, was busily engaged Friday night and today working in behalf of the clause objected to by Senator Hendricks. He is registered as a lobbyist for the Indiana Osteopathic Association.

"Senator Jacob Weiss, Indianapolis, president pro tempore, fought to retain the provision.

"Weiss held several hurried conferences with Richard Shirley, Indianapolis, secretary of the Alcoholic Beverages Commission, while discussion was carried on the floor. O'Mara remained in the rear of the Senate chamber during the session.

"Senator Thurman A. Gottschalk, Democrat, Berne, joined Senator Hendricks, asserting the provision would permit groups to come into the James Whitcomb Riley Hospital for Children and treat the inmates regardless of the attitude of hospital officials.

"Referring to a dodger placed on several senators' desks by O'Mara Friday, Senator LeRoy Portteus, Democrat, Indianapolis, said no one was willing to assume responsibility for its contents."

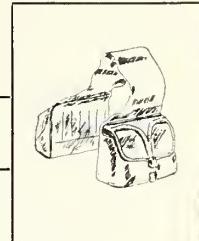
Although 129½ was out of the bill, and the opposition was shaken, the matter was not a closed affair as yet, for the House had to concur in the Senate action and there was still room for legislative maneuvering at which the forces opposing the profession are known to be past masters. The matter was carefully watched, and your committee was gratified when it was announced that Lieutenant-Governor Townsend and Speaker of the House Edward Stein, both key men, appointed on the conference committee such friends of the medical profession as Dr. Horace R. Willan, of Martinsville, Dan O. Gettinger, of Sullivan, and Senators Walter Vermillion, of Anderson, and William D. Hardy, of Evansville. Had the measure not become entangled because of the welfare board-township trustee battle at this juncture, there is little doubt but that the House would have readily concurred in the Senate action without the necessity of having a conference committee appointed.

In closing, the committee thanks the many friends of the profession, the physicians throughout the state who so ably demonstrated their influence when matters of the public welfare are at stake, and particularly Dr. Norman Beatty, who, as chairman of the legislative committee of the Indianapolis Medical Society, did untiring and timely day and night service throughout the battle.

The committee also wishes to thank the legislative committee of the Indiana State Dental Society who cooperated with your committee in sending a joint delegation to Washington to find out definitely where things stood in regard to the local self-government features of the proposed legislation.

COMMITTEE ON LEGISLATION AND PUBLIC POLICY, INDIANA STATE MEDICAL ASSOCIATION,

O. T. SCAMAHORN, M.D., Chairman,  
GEORGE DANIELS, M.D.,  
GEORGE DILLINGER, M.D.



## Indiana Medicine in Retrospect

L. C. ZERFAS, M.D.  
Historian, Indiana State Medical Association

### MEDICAL CASES AS REPORTED IN ASAHEL CLAPP'S DIARY

Dr. Robert Cravens very meticulously recorded the lecture notes taken at the Philadelphia Medical School in 1815,\* and we wish that he had lived long enough to have given us an accurate record of the cases he had in Madison. Perhaps the best record we have of that period in the practice of medicine in Indiana is the diary of Dr. Asahel Clapp in New Albany, Indiana. The first entry is April 6, 1819, and it is interesting to note that the first six cases are those of children.

"April 6th, 1819. Visited a child of Wm. Roan's with the humerus fractured immediately above the elbow. The humerus was but little displaced but the crepitus in reducing it was very distinct. There was a large ecchymosis on inside of arm. It was broken by a fall from a log backwards into a brook in such a manner as to strike the back part of the elbow against a stone. I applied one long splint on the lower side of the arm extending along the lower side of the ulna and along the humerus in such a manner as to prevent any motion in the elbow & another crooked splint somewhat like a gambrel to fit to the elbow on the inside of the arm. The fracture was an inch above the elbow nearly opposite the extreme point of the olecranon.

"April 7th. I was called up at 2 o'clock this morning to visit the girl; her arm was considerably swelled and her hand was quite livid. (I had ordered yesterday the constant application of spirits which had been continued regularly.) The bandage being loosened gave her considerable relief. Next day the spirits was changed for salt & vinegar which had a good effect.

"14th. I took off the old bandages & applied new ones. The arm is not much painful and but little tumefied. It has not begun to unite.

"16th. She is walking about without suffering any pain or inconvenience from her arm.

"19th. I was called on this morning. She had walked out the most part of yesterday & caught cold—considerable fever—Complains of pain in her hand and wrist but not of any in the place where her arm was fractured.

"20th. Some better, appetite pretty good—very fretful.

"19th. I visited a son of J. McClory's ten years

of age who had fractured the metacarpal bones of the fore & middle fingers. The metacarpal bone of the forefinger was sticking through the skin. It was occasioned by a log's rolling over it. The reduction was easily effected. I applied 1 splint in the palm in such a manner as to keep the knuckles sufficiently raised and supported in their place; and another on the back of the hand to keep down the ends of the bones. It was done up in the blood without any other application.

"20th. The fingers are somewhat swelled, but not livid. He complains of no pain in the hand and was walking about outdoors. The blood has oozed through the dressing so as to make a firm case.

"A child of Benj'n Blackstone two years old ate a quantity of the seeds of the Datura Stramonium (Jimson weed) and was taken about two hours afterwards with convulsions. I was called at this time and found it considerably convulsed at intervals of two or three minutes; I immediately gave the sulphate of zinc and vinegar which produced vomiting and brought up considerable food that it had eaten about half an hour before. Its bowels were considerably swelled and tumid and the pupils dilated and much disposed to coma. Doct. Galt<sup>1</sup> being in town, I sent for him immediately. We continued sulphate and vinegar till it had vomited several times, but not so freely as could be wished; it brought up one of the seed which was distinctly perceived. Gave an injection of salt warm water and Ol Ricini. Extremely difficult to keep the child awake. Doct. G. thrust repeatedly a feather down its throat covered with mustard in order to irritate its panus and excite vomiting. I was soon called to a woman in labour which prevented

<sup>1</sup>"Dr. William Craig Galt (1777-1853), son of John Minson Galt, Surgeon General of the Virginia forces in Revolutionary War. Dr. Galt was born in Williamsburg, Virginia, April 8, 1777, and emigrated to Kentucky 'toward the close of the 18th century,' settled in Louisville. 'No physician here when he arrived.' Great need for physicians, so he induced his cousin, Dr. Richard Ferguson, to come to Louisville and settle.' Dr. Galt was General George Rogers Clark's physician during his last illnesses. The first Galt House was built on site of his home. Died Oct. 22, 1853, Louisville, and is buried in Cave Hill Cemetery. He was one of the five managers of the Louisville Library, incorporated by act of the Kentucky Legislature, 1816. This was the beginning of the several library projects that later developed into the present Louisville Free Public Library. He was also one of the incorporators of the Medical Institute of Louisville, chartered February 2, 1833."—*Kentucky Pioneer Doctors*, published by Daniel M. Hutton, Harrodsburg, Kentucky, 1934.

\* Hahn, E. V.: *Glimpses Into Surgical Classroom of 1815 Through the Notebook of Robert Cravens, M.D.* *J. Ind. St. Med. Assoc.*, 29; 3 (Mar.), 1936, p. 112.

me from being present any longer. I was informed that the child was kept in motion as much as possible to prevent it from going to sleep—but all was ineffectual. The child died about 12 o'clock. I was called about half past seven o'clock.

"Stephen Beers & Daniel Watson had each of them a child to play together. When they came in, they had each of them some of the datura stramonium in their mouths. Their pulses were not much affected, but their countenances were somewhat flushed and their pupils dilated; they appeared playful and not in the least distress. I immediately gave them a strong solution of Sulphur Zinci and continued it in large doses for upwards of an hour before it operated. In a few minutes after I gave large draughts of vinegar; they drank nearly a quart. The pupils were considerably diminished before they vomited at all. Indeed, it seemed almost impossible to excite vomiting. I gave upwards of a dram of the sulphate and repeatedly thrust a feather down their panus before they vomited. They vomited but little and brought up some of the seeds. They were in a few hours perfectly recovered. The Stramonium seemed to render the stomach almost insusceptible to the action of vomiting. The vinegar and the great exertions they made to avoid taking the medicine, probably had considerable effect in counteracting the poison because their pupils were not so much dilated for some time before they vomited. Could the sulphate have had any effect before it operated as an Emetic?

\* \* \* \* \*

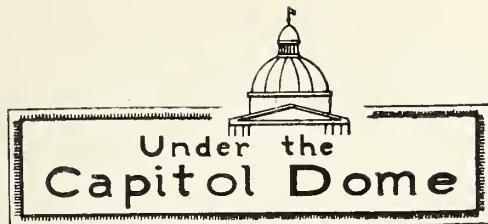
"January 7th, 1820. I was called to visit a child of Mr. Himes, aged 2 years and three or four months, that had just taken about two drams of Fowler's Arsenical Solution. I saw the child 15 or 20 minutes after it had taken the solution. It had puked once and ejected considerable food it had about an hour before eaten for dinner. The child made no complaint except wanting some drink which its mother refused. There were no symptoms by which any person would judge the child was not in perfect health. I immediately gave it a strong solution of the sulphate of zinc which operated in a few minutes and brought up a considerable quantity of food. The measure was repeated till the stomach was thoroughly cleansed. Two large spoonfuls of Olive oil were then administered—and I prepared a solution of Soap Cast. Sal. Sod. and the white of several eggs thoroughly beaten and gave two or three tablespoonfuls every fifteen minutes which was followed by vomiting in a few minutes after each time taking it. The child's pulse became considerably more frequent and it had a disposition to sleep—which was probably occasioned by the violent exertions the child made against taking the medicine. The patient recovered without any alarming symptom or any symptoms by which it might have been supposed it had taken any poisonous medicine.—Note—The

child was remarkably robust and corpulent and never had suffered any from sickness.

"January 9th, 1820. A girl of between three and four years of age got a kernel of corn in its windpipe. It produced a violent fit of coughing with symptoms of suffocation. The child was brought to me. I gave it a dose of laudanum with an intention of allaying the spasmotic action of the glottis. The laudanum occasioned vomiting in a few minutes after it was taken which relieved the distress of the child and it observed to its father that it was well. The child was perfectly easy nearly 24 hours except a feeling in its breast which it compared to a bone. The symptoms of suffocation returning Doct. Young was called on; he prescribed an emetic which operated well but produced no relief. The parents then sent for Doct. Middleton of Louisville who attempted the operation of pharyngotomy. After dividing the integuments over the thyroid cartilage he endeavored to pass the scalpel into the cavity of the larynx several times but unsuccessfully; there being some hemorrhage and child's struggling and coughing made it extremely inconvenient on account of the continual displacement of the larynx by the coughing and struggling of the child. These difficulties induced him to give up the operation. The wound was brought together by adhesive plasters and healed by the first intention. The child for about three weeks was generally playful except when the corn was thrown up into the larynx and threatened suffocation. These paroxysms were from 3 to 20 or 30 times in 24 hours.

"On the 1st day of Feb. I was called in haste to see the child. Doct. Young was already present. The child was suffocating, its face was of a deep purple color and in severe struggles for breath. It died in about one minute after I got there. I made several attempts by depressing the tongue and pulling it forward to get at the corn with a bent probe but unsuccessfully.

"About 2 hours after death I proceeded to examine the trachea. I commenced my incision by the side of the scar which remained after the former operation; I soon struck the os hyoides proceeding to open the larynx and trachea. I felt a lump just below the larynx which slipped from my finger and at the same time air escaped from the lungs upon which I bent my probe into the form of a hook and introduced it into the Bronchia and extracted the kernel of corn. From my following the scar that remained after the operation of Doct. Middleton and coming upon the os hyoides I am confident that it was the principal difficulty that occurred to hinder the introduction of the scalpel; and that he was probably deceived by the position in which the child's neck was placed it being leaned backwards brought the os hyoides farther down in the neck than in its natural situation. The child having a short neck and very fleshy the prominence of the thyroid cartilage was not so easily discovered; the os hyoides might have been mistaken for it."



Miss Jessie Beck, who served as a stenographer in the Indiana Division of Public Health for the past twelve years, died February 24 at the Methodist Hospital in Indianapolis.

#### WPA PUBLIC HEALTH WORK

Works Progress Administration employees are engaged on a number of projects affecting public health, either directly or indirectly, in several Indiana cities and towns, according to bulletins issued from WPA headquarters.

A project for making improvements on the municipal water works system at Batesville, to extend service to patrons not now served and fire protection to outlying districts, is employing ten WPA workers. Under another project employing eight men, improvements are being made in the public park.

At Goshen, a WPA soil erosion and flood control project for the building of stone walls and filling ground at the sewage disposal plant is giving work to fifty-seven workers.

Improvements are being made on the water distribution system at Greencastle under a WPA project employing twenty men. When the work is completed, the city will be assured of sufficient water to supply its needs for many years.

Twenty-seven Works Progress Administration employees are engaged in repairing and extending the sewer system in Kendallville. In Aurora, thirteen WPA workers are laying 3,000 feet of tile in various streets, while twenty six employes are making general repairs on the buildings of the LaPorte County Asylum. Twenty-five WPA employees are constructing new playgrounds and improving old ones in Putnam County, and at Hobart drainage facilities are being improved as part of a WPA project.

#### COST OF OPERATION OF STATE INSTITUTIONS

Operation of the state's benevolent and correctional institutions cost \$4,467,245.41 during the last fiscal year, according to a report recently issued by the state division of accounting and statistics. This figure represented the cost of maintenance, repairs, and construction of buildings and acquisition of land.

The Indiana State Prison at Michigan City was the most costly, the total being \$554,341.76.

The Central State Hospital for the Insane cost

\$408,488.92. Cost of running the other hospitals for insane was: Logansport State Hospital, \$287,879.80; Richmond State Hospital, \$269,010.89; Evansville State Hospital, \$185,669.13; Madison State Hospital, \$319,479.77; the Fort Wayne School for Feeble-Minded Youth and the Farm Colony, \$423,230.88.

Operation of the Indiana Village for Epileptics cost a total of \$226,333.24. For running the sanitorium for tuberculosis patients at Rockville, the cost was \$130,916.17.

The cost of operating the State School for the Deaf in Indianapolis for the fiscal year was \$147,933.94, while that of the State School for the Blind was \$61,347.64.

Costs of operating and maintaining the other institutions were: Indiana Soldiers' Home, at Lafayette, \$225,206.51; Soldiers' and Sailors' Orphans' Home, at Knightstown, \$333,792.52; State Reformatory, at Pendleton, \$395,469.88; Indiana State Farm, at Putnamville, \$189,738.30; Indiana Woman's Prison, in Indianapolis, \$42,756.21; Indiana Girls' School, at Clermont, \$109,236.76, and Indiana Boys' School, at Plainfield, \$156,413.09.

#### TREATMENT OF INDIGENT SYPHILITICS

The Indiana Division of Public Health has distributed 9,130 ampules of neo and sulpharsphenamine to clinics, transient camps, and to private physicians in communities without clinics, for the treatment of indigent persons infected with syphilis, since May 1, 1934, according to Dr. Verne K. Harvey, director of the health division.

"It is gratifying to note that physicians of the state are supporting this type of service and system of medical treatment," Dr. Harvey said. "The state health department is looking into the future with greater confidence in controlling the prevalence of syphilis. It expects continued cooperation from physicians just as long as the health and lives of indigent syphilitic patients depend upon adequate anti-syphilitic medical treatments. It is well known that numerous persons, through no fault of their own, become infected with syphilis—that is, accounting for the innocently infected patients and the congenital cases."

Plans for distributing neo and sulpharsphenamine for treatment of indigent infectious syphilitic patients, or patients who are in a stage of infection or period of life which endangers other individuals or progeny were laid in 1934. Since that time the records indicate that 3,360 ampules were distributed to private physicians, 3,861 ampules to public health clinics which are financed by local appropriations, and 1,917 ampules to transient camps. Neoarsphenamine is distributed in .3 gm., .45 gm., .6 gm. and 4.5 gm. ampules, and sulpharsphenamine in .3 gm., .4 gm., and .6 gm. ampules.

"Progress in the control of syphilis can be made, and the spread of this disease can be prevented to a very great extent, by proper treatment of those infected," Dr. Harvey said.

## MEDICO-LEGAL COLUMN

### RIGHT OF PHYSICIAN TO USE X-RAYS MADE BY HOSPITAL

ALBERT STUMP

Attorney for the Indiana State Medical Association

A study of the law applicable to the right of a physician treating a patient to examine x-rays made by a hospital under the direction of some other physician, indicates that the patient has the right to require the hospital to permit an examination of all the records, including the x-rays, to be made by any physician who is in attendance upon the patient, whether the physician had the x-rays made or any part of the record made under his own direction. The conclusion is reached from a consideration of general principles of law governing this relationship of which a discussion follows:

The hospital facilities are devoted to the care and treatment of the patient, under the direction of a physician. The hospital is not in exactly the status of a servant to the physician, but rather occupies the status of an independent contractor gathering and collecting data to give to the physician to be used in the treatment of the patient. The relationship of independent contractor exists between the patient and the hospital. That is, when the patient engages the services of the hospital, including the making of laboratory tests, x-rays, or any other of the things that are included within the services of a hospital, he engages the hospital to perform these services under the direction of the physician but for the benefit of the patient.

Without any definite contract drawn up and signed in a formal manner, there exists the implied contract that the hospital will render these services to aid in the treatment of the patient. To make them effective, the results of the work of the hospital must be available to the physician.

There will be imported into the implied contract the customs that ordinarily prevail in regard to the matters involved. The general practice in the treatment of a patient in a hospital is to keep hospital records away from the patient so long as he remains a patient. The records do not become the property of the patient. They are the property of the hospital. But part of the services which the hospital is under obligation to render the patient is to make the records available to the physicians whom the patient employs for his treatment in the hospital. This obligation of the hospital to the patient continues even though the patient changes physicians. The records are not the property of the physician, and the physician has no control over the records. The physician occupies a confidential relationship with the patient and it is his duty to keep confidential whatever he knows of the patient's records.

The hospital being charged with the duty of per-

mitting the use of the records, including x-rays, for the treatment of the patient under whatever physician may be in charge of the case, the physician in charge should be permitted by the hospital to see all x-rays and laboratory records or other records of any kind in the possession of the hospital. This is a right which pertains to the patient, however, and not to the physician. That is to say, if the right were sought to be enforced in a court of law, the action would have to be brought by the patient. The hospital in refusing to permit a physician to inspect the records made under the direction of a former physician in the case would be failing, not in any duty owing to the physician to whom such refusal is made, but in a duty owing to the patient under the implied terms of the patient's contract with the hospital.

### DIPHTHERIA IN FEBRUARY

In the month of February, 1936, ten deaths from diphtheria were recorded. The age at which death occurred is very interesting, indeed, for there was but one school child in the entire group. In order that the profession may see what is happening in connection with diphtheria deaths, we give the ages as follows: seventy, one, eleven, forty, twenty-six, two, five, sixty-one, three, and two.

The distribution of the deaths by counties for the month of February and for the period of the year is shown in the table given below.

County	No. for Month February, 1936	No. for Year 1936
Allen	0	2
Brown	0	2
Cass	1	1
Clark	0	1
Delaware	1	1
Dubois	0	1
Elkhart	0	1
Grant	0	1
Greene	1	2
Howard	0	1
Jennings	0	1
Lake	0	1
Lawrence	0	1
Madison	2	4
Marion	0	3
Martin	1	1
Montgomery	0	1
Farke	1	2
Ripley	0	1
St. Joseph	0	2
Tippecanoe	2	2
Vanderburgh	1	2
Warren	0	1
Washington	0	1
Total	10	36

Thurman B. Rice, M.D., Chairman,  
Diphtheria Prevention Committee.

**SECRETARIES' COLUMN**

A short time ago, in New York, an official of a bar association said that the socialization of the legal profession was a possibility. Since this puts the barristers on the defensive, I believe it would be beneficial to all concerned if the county medical societies would have joint meetings with the bar associations. There should be a speaker from the legal profession and one from the medical profession.

I have just learned that section 129½ of the Welfare Bill was defeated in the Senate. Remember to write a letter of thanks to your senator for his assistance. Now the Indiana law conforms to the Federal law. Be sure to study the social security bill just passed by the legislature.

In New York State there was a bill in the legislature to distinguish between hospital facilities and medical service. The hospital superintendents through their boards of trustees made such a fuss that the bill has been withdrawn. They were afraid to have the truth known, that some of the charges made to patients were for medical services under the guise of hospital facilities. It also was noticed that the medical profession took very little interest in the bill. They did not back up the gentlemen who introduced the bill for them. No wonder the physician is the under-dog. In so many instances, he seems to lack the courage to fight for his rights. If the doctors had the American spirit of 1776, they would be in a better position today, both professionally and economically.

Did you read Dr. Van Etten's article in the *Journal of the A. M. A.* for March 7, 1936? I think it goes a long way in showing the neglect in the training of medical students.

Have your county medical society programs this year included cardiovascular and neoplastic diseases?

**Don't forget April 6th to 11th.** During that time the postgraduate course will be in full swing at the medical school and at the Claypool Hotel in Indianapolis. Be sure to mark your calendar and "gasoline it" to the front row. The program will be beneficial and it will help you to get out of the rut. On April 8th and 9th, the programs will be in charge of the Indiana State Medical Association.

Turn to page 194 and read the program.



Merrifield  
Chairman.

**VOICE OF THE DOCTOR****SOCIAL SECURITY**

For the past decade, Dr. Edward H. Ochsner has been one of the best surgeons in Chicago. He succeeded his probably better known brother, Albert J. Ochsner, as surgeon-in-chief of the Augustana Hospital, and his researches in medical economics have made him an international figure. With an intimate knowledge of European languages, doing post graduate work in Germany, Austria and Sweden after graduating from Rush Medical in Chicago, he brought back first hand knowledge of medical conditions as they were then developing, and as they have since resulted in chaos. In 1931 he published a series of articles that were so well received that they were put in book form and several editions were sold for \$2.50 each. Their value to the profession is such that a demand for them has permitted a cheaper edition to be sold for fifty cents. Every doctor and dentist in this country should have and read carefully every page of this book. To make this possible, Dr. Ochsner advises me they will be furnished in lots of 100 at cost of paper and printing, 25 cents each, and every district councilor should recommend every county society to order a copy for each member. The Madison County Medical and Dental Societies are heading this list, and as councilor of the Eighth District, I am asking all my counties to give this matter serious attention, as no expense the county societies can incur will bring them more needed information. A few high lights from Dr. Ochsner's book are as follows:

"Social insurance is the hybrid offspring of impractical sentimentalism and political expediency."

"Social insurance laws undermine national character, destroy individual initiative, incentive and self-reliance, and substitute paternalistic control for independence of thought and action; and from paternalism there is but a short step to socialism."

"In a period in which the population has increased ten per cent the number of civil office holders has increased from one in forty-seven to one out of every twelve of our citizens between the ages of sixteen and sixty."

"In 1906 national and local taxes took one-thirteenth of the national income, but since 1930 it has taken over one-third of our national income."

"The greater the economic domination of any system of insurance, the more it tends to become a political football."

"The health of a community is a community problem, but the healing of the sick is a very personal matter."

"The national government has had under its medical care over one per cent of the population ever since its establishment 160 years ago. In

all this time nothing new or important in the treatment of disease has been developed by the medical staffs of the army, navy or the public health service."

"In Germany at this time the fee schedule for medical services provides the following remunerations: House calls, forty-four cents; office calls, twenty-two cents; appendectomies, five dollars; stomach resections, eight dollars; tonsillectomies, one dollar and twenty-five cents."

"Years ago I took care of a very large number of charity patients sent me from a well-known social settlement in Chicago, and of all the thousands of patients whom I have served in my professional experience, they followed directions the poorest, were the most exacting, and the least appreciative."

"In England Sir Francis Neilson states that the practice of medicine has been reduced to a question of physical endurance without regard to brains or ability."

Every page of Dr. Ochsner's 235-page book is filled with such facts that we can no longer ignore.

M. A. AUSTIN, M.D.

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FROM INDIA

Shikarpur, India,  
January 20, 1936.

Dear Doctor:

The past two and a half weeks here in Shikarpur with Dr. H. T. Holland have been exceedingly interesting and instructive. The routine of life is becoming less strange as time goes on, and time goes on very rapidly as we are kept busy. Already, Dr. Powell and I have each done about a hundred and fifty cataract extractions, and we shall doubtless do at least as many more before the session closes. Today we had a hundred and sixty-four operations, of which eighty-two were cataracts. Such a day, of course, is quite tiring and gives us little time for meals as we have, also, to attend to the redressing of cases already done.

The Seth Hiranand Eye Hospital has, I find, been functioning for the good of the native Indians of the Sind Province, the Punjab and Baluchistan, during the months of January and February, for the past twenty-six years. Dr. Holland has devoted his entire medical life to missionary work under the British organization known as the Church Missionary Society, and has been out in India for thirty-five years, with only occasional leaves to England. The natives, this year in particular, have been unusually solicitous as to Dr. Holland's health since they knew that he had been in Quetta at the time of the devastating earthquake there last May, and word-of-mouth stories as to his welfare had been conflicting. I had preceded Dr. Holland's arrival here by two days, and when "Holland Sahib" actually appeared at the hospital compound, the ovation given him was most enthusiastic.

The term "Seth" is one of respect, and not a proper name. Seth Hiranand first prevailed upon Dr. Holland to come to Shikarpur, to hold an eye surgical clinic, twenty-seven years ago, and the first year's work was done at the Seth's house. The results were quite good; but working conditions for the surgeons were so makeshift that Dr. Holland refused to return unless some adequate building was obtained in which surgical equipment could be installed, and a semblance of surgical technique could be followed. The present building was therefore provided by the Seth for the next year; and it has been in use during every January-February session since that time. Each year the volume of surgery has increased. Last year 1,452 cataracts were done, in a total of about 3,000 operations, including optical iridectomies, operations for glaucoma, plastic lid operations for the correction of trichiasis and entropion, and other procedures. The chief diseases dealt with are, in the order of the prevalence, cataract, glaucoma and trachoma.

Our surgical results are remarkably satisfactory, especially when it is realized that there is no other preparation for surgery than scrupulous cleansing of the eyes. No physical examination is done, nor postoperative medication given. It is rather the common thing for patients to come in from the dusty highways, be operated on for cataract, then carried over to the hospital compound where they are cared for by their relatives, all in the course of an hour. Yet out of six hundred cataracts so far done, we have lost but four eyes: three from choroidal hemorrhage, and one from infection. Such figures compare quite favorably with those in our own country. I am of the opinion that the low incidence of infection is due to the minimum amount of intra-ocular instrumentation done in the intra-capsular technique we follow in the great majority of the cataract extractions. This technique is based on the Smith operation, modified somewhat by Dr. Holland.

The routine of the intra-ocular surgery is interesting. The patients are first seen by Dr. Holland in the clinic room. He then makes the diagnosis by external examination, if possible; but, if in doubt, patients are seen ophthalmoscopically in the dark room. The surgical cases are then marched into the clean surgery and a facial nerve block is done and the lashes abscised. Then, three applications of a 4% solution of cocaine are instilled at five minute intervals. The patients are next told to hop upon the table, when tension is taken with the McLean tonometer. If tension is above 32, cataract, in capsule, is sometimes done, but not often. Or, if the patient is plethoric, with tendency to prominent eyes, intra-capsular is not attempted; instead, capsulotomy with iridectomy.

The eyes are irrigated, and lash margins vigorously cleansed, and meibomian glands expressed between the fingers; using, all of this time, an irrigation of 1/2000 bichloride of mercury solu-

tion. Both eyes are done in this way. Then the speculum is placed between the lids of the right eye, and again 1/2000 bichloride irrigation, being careful to drain all excess away to avoid striped keratitis. With Graefe knife and fixation forceps a full half section of cornea is made, without a conjunctival flap. Then complete iridectomy, and speculum is removed. The native assistant then holds the brow to limit the orbicularis, and slips a double hook under the upper lid margin, pulling the lid up from the globe . . . that is, anteriorly, but not up toward the brow. At the same time, with his other hand (left hand) he holds the lower lid down from the globe, using a small pledget of cotton under his left thumb to keep it from slipping, on the patient's skin, over the lower rim of the orbit. The operator then applies pressure toward the optic nerve, at the lower limbus, with a squint hook, in the right; while the eye is steadied with a Smith spoon below this point. The operator watches closely for dislocation of the lens and, when this occurs, follows it up with the hook.

Iris pillars are replaced with the other end of the Smith spoon, which is a repositor, and then the double hook is gently slipped out from under the upper lid, and the eye closed. The extraction is done, really, up under the upper lid, in the superior cul de sac, the patient not looking down as that would tend to favor vitreous prolapse. The age limit seems to be about forty-five minimum for this procedure, or fifty; and, of course, the older patients' zonules let go easier. Dr. Holland does not favor tumbling of the lens, because if vitreous presents it is more difficult to remove with the vectus if the lower zonule is broken but not the upper, as would be the case in tumbling. In his thirty-five years' experience, Dr. Holland has done over 30,000 cataracts and, as can be imagined, is a beautiful operator.

Patients are kept nine days postoperatively to cataract extraction as, after release from the hospital at that time, many of them are never seen again. For this same reason we do double cataracts at one sitting . . . a thing we would not consider doing at home.

There are two types of patients among the Indians who come in for services: the Mohammedans and the Hindus. The Mohammedans are complaisant and composed, making the finest kind of eye patients. The Hindus, on the other hand, are not cooperative. This difference of character is so pronounced that, solely by the actions of the patient on the table, we are able to determine his religion, almost without error. Curiously, the incidence of choroidal hemorrhage among Hindus is, according to Dr. Holland, about twice what it is among Mohammedans. There seems to be no relation between vascular hypertension and choroidal hemorrhage, or intra-ocular tension and choroidal hemorrhage to account for this difference. The Hindu seems to have more brittle choroidal vessels.

Hamilton Row, M.D.

## DEATH NOTICES

ERIC A. CRULL, M.D., of Fort Wayne, died March fifteenth, aged fifty-nine years. Dr. Crull was widely known as a tuberculosis specialist. He was instrumental in the organization of the Fort Wayne Anti-tuberculosis League in 1910, and was its first president. He established an open air camp near Fort Wayne in 1910, and later aided in the establishment of the Irene Byron Sanitarium and served as its superintendent and medical director for many years. He retired from active practice several years ago. Dr. Crull graduated from the Marion Sims College of Medicine, St. Louis, in 1897.

JAMES B. MAGUIRE, M.D., of Terre Haute, died March second, aged fifty-three years. Dr. Maguire was Harrison township physician at the time of his death, and was widely known in Terre Haute. He was a member of the Vigo County Medical Society, the Indiana State Medical Association, and the American Medical Association. He graduated from the University of Illinois College of Medicine, Chicago, in 1907.

WILLIAM H. DINGS, M.D., of Mitchell, died February seventeenth, aged sixty-two years. Dr. Dings had practiced in Mitchell for more than thirty years. He was a member of the Lawrence County Medical Society, the Indiana State Medical Association, and the American Medical Association. He graduated from the Louisville Medical College, Louisville, Kentucky, in 1894.

GEORGE D. BALSBAUGH, M.D., of North Manchester, died February twenty-first, aged fifty-six years. Dr. Balsbaugh was president of the Eleventh District Medical Society at the time of his death, and for many years had been active in medical organization work. He had practiced in North Manchester for thirty-two years, and was a graduate of the Kentucky University, Medical Department, Louisville, in 1904. He was a member of the Wabash County Medical Society, the Indiana State Medical Association, and a Fellow of the American Medical Association.

WILLIAM L. HUGHES, M.D., of Indiana Harbor, died February eighteenth, aged sixty-three years. Dr. Hughes graduated from the Barnes Medical College, St. Louis, in 1899. He was given the American Legion honorary award in 1931 in Indiana Harbor in recognition of his services as a valuable citizen.

HARRY G. GRABLE, M.D., of Kokomo, died February twenty-second, aged fifty-four years. Dr. Grable was a member of the Howard County Medical Society, the Indiana State Medical Association,

and a Fellow of the American Medical Association. He graduated from the University of Illinois College of Medicine, Chicago, in 1906.

JOHN STEWART, M.D., Indianapolis, died March ninth, aged thirty-four years. Dr. Stewart was a member of the Indianapolis Methodist Hospital Staff, and was an officer in the medical reserve corps. He graduated from the Eclectic Medical College of Ohio, Cincinnati, in 1928. He was a member of the Indianapolis (Marion County) Medical Society, the Indiana State Medical Association, and a Fellow of the American Medical Association.

J. D. RICHER, M.D., of Warsaw, died February twenty-eighth, aged sixty-nine years. Dr. Richer had retired from active practice. He was a graduate of the Hahnemann Medical College and Hospital, Chicago, in 1896.

EDWARD F. DEVAUX, M.D., of Fort Wayne, died March eighth, aged seventy-six years. Dr. DeVaux had practiced in Fort Wayne for forty years, and had been Adams township relief physician for twenty-four years. He graduated from the American Eclectic Medical College, Cincinnati, in 1893, and was a member of the Fort Wayne (Allen County) Medical Society, the Indiana State Medical Association, and a Fellow of the American Medical Association.

ALBERT G. SHAUCK, M.D., of Arlington, died February twenty-fourth, aged fifty-eight years. Dr. Shauck graduated from the Medical College of Indiana, Indianapolis, in 1905, and was a member of the Rush County Medical Society, the Indiana State Medical Association, and a Fellow of the American Medical Association.

DR. JOHN MADISON FISHER, of Lapel, died at the home of his daughter in Williamsburg, February twenty-second, at the age of ninety years. Dr. Fisher had retired from active practice many years ago.

JOSEPH ELLMORE WIER, M.D., of Evansville, died March sixteenth, aged fifty-two years. Dr. Wier had been connected with the Welborn-Walker Hospital in Evansville for many years. He went into army service during the World War, and remained in that work until 1929. Dr. Wier graduated from the Indiana University School of Medicine, Bloomington and Indianapolis, in 1913, and was a member of the Vanderburgh County Medical Society, the Indiana State Medical Association, a Fellow of the American Medical Association, and a member of the Associated Anesthetists of the United States and Canada..

## HOOSIER NOTES

Bids have been received for a new doctors' office building to be erected in New Haven, by Dr. C. W. Dahling.

The Psi Iota Xi sorority has presented an oxygen-aire to the St. Edward's Hospital in New Albany.

Dr. Nelle C. Reed, former school physician and health officer of Michigan City, has returned to active practice.

Dr. and Mrs. C. F. Hope have returned to Loogootee from Ellettsville. Dr. Hope will resume his practice in Loogootee.

According to newspaper reports, the Indianapolis Medical and Dental Business Bureau is being used as a model for a similar organization in Cedar Rapids, Iowa.

Dr. Paul Crimm, of Evansville, addressed the Evansville Rotary Club, March third, and urged public cooperation in prevention measures against tuberculosis.

"Neuropsychiatry in General Practice," will be the subject of a postgraduate course to be held at the Menninger Clinic, Topeka, Kansas, April 20-25, 1936. Enrollment is limited to thirty.

The March issue of the *Radiologic Review and Mississippi Valley Medical Journal* is the ninth annual "radium number" of that publication, and is devoted entirely to articles dealing with radium therapy.

Dr. Kellogg Speed, of Chicago, was the speaker at the February twenty-fifth meeting of the Evansville Post-Graduate Group. Dr. Speed's subject was "The Mechanism and Treatment of Fractures."

A Cancer Committee for the Indiana State Medical Association has been appointed, with the following members: Dr. Charles Myers, Indianapolis; Dr. E. M. Pitkin, Martinsville; Dr. Paul W. Ferry, Kokomo.

Dr. S. R. Boggess, formerly of Batesville, Indiana, died at Lawrenceburg, Kentucky, February thirteenth. Dr. Boggess was well-known in Batesville where he practiced with Dr. J. T. Carney. He served as president of the Ripley County Medical Society at one time.

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The Indianapolis Society of Clinical Laboratory Technicians met March 19 at the Indianapolis City Hospital. Dr. P. J. Fouts talked on "Laboratory Diagnosis of the Anemias." Following the meeting, the City Hospital laboratories and the Lilly Laboratories for clinical research (in the City Hospital) were open for inspection.

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The American Association on Mental Deficiency will hold its sixtieth annual meeting at the Hotel Jefferson, St. Louis, Missouri, on May 1, 2, 3, and 4. Any one interested in the mentally defective or retarded child is invited to attend the sessions. Complete program may be obtained from the secretary, Dr. Groves B. Smith, Godfrey, Illinois.

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Dr. J. W. Bowers, of Fort Wayne, has been made president-elect of the Federation of State Medical Boards of the United States. The honor was given Dr. Bowers at the time of the thirty-second annual Congress of Medical Education, Medical Licensure, and Hospitals, held in Chicago in February.

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Announcement is made of examination for entrance into the regular corps of the United States Public Health Service in the grade of Assistant Surgeon (medical only), to be held April 13, 1936. Applicants must not have passed their thirty-second birthday. Any one desiring to take the examination should make request to the Surgeon General, U. S. Public Health Service, Washington, D. C., for the necessary blanks and other information.

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Announcement has been made by G. D. Searle and Company, of Chicago, of the appointment of Dr. Albert L. Raymond as director of their Research Laboratories. Dr. Raymond has resigned from the Rockefeller Institute of Medical Research, with which he has been connected for the past nine years, to take this appointment with the G. D. Searle Company.

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The Indiana Society for Mental Hygiene will hold its twentieth annual meeting in the Claypool Hotel, Indianapolis, May 1 and 2, convening Friday night and adjourning Saturday afternoon. A program of lectures and round table discussions on various aspects of the subject of mental health

is being arranged, and copies of the program can be obtained about April 1 by addressing the secretary, Mrs. Hazel Hansford Stevens, 333 North Pennsylvania Street, Indianapolis.

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An auxiliary to the St. Joseph County Medical Society was organized March sixth, when a meeting was held in the Oliver Hotel in South Bend. Dr. R. L. Sensenich of South Bend, President of the Indiana State Medical Association, explained what the purposes of the auxiliary are, and Mrs. George Dillinger of French Lick explained the work of the auxiliary and gave suggestions to the new officers who are: Mrs. Harry L. Cooper, president; Mrs. Milo K. Miller, vice-president; Mrs. R. M. McDonald, secretary; Mrs. Louis A. Sandoz, treasurer, and Mrs. H. W. Helmen, corresponding secretary. Reservations were made for ninety attendants at the organization meeting.

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Dr. C. O. McCormick, of Indianapolis, recently presented a paper on "Analgesia in Labor" before several eastern societies. The paper was illustrated with moving pictures. On February 24th, Dr. McCormick addressed the McKeesport (Pennsylvania) Academy of Medicine; on February 25th, he talked before the Section on Obstetrics and Gynecology of the New York Academy of Medicine, and on February 26th before the obstetrical department of Johns Hopkins University; on February 28th, in the afternoon, he addressed the obstetrical department and student body of Georgetown University, and in the evening he talked before the Washington Obstetrical and Gynecological Society.

#### TENTH DISTRICT MEDICAL SOCIETY

Valparaiso, April 29, 1936

2:30 P. M.—Sidney A. Portis, Professor of Medicine, Rush Medical College. Subject: "Recent Advances in the Field of Gastro-Enterology."

3:15 P. M.—Cleveland J. White, Assistant Professor Dermatology, Northwestern University Medical School. Subject: "Eczema, Modern Interpretation and Treatment."

4:00 P. M.—I. F. Volini, Associate Professor of Medicine, Loyola University Medical School. Subject: "The Etiologic Diagnosis of Heart Disease."

4:45 P. M.—H. O. Jones, Professor of Gynecology and Obstetrics, Northwestern University Medical School. Subject: (Gynecological Subject).

6:30 P. M.—Dinner.

7:30 P. M.—W. D. Gatch, Dean, Indiana University School of Medicine. Subject: "Cancer of the Breast."

All members of the Indiana State Medical Association are cordially invited to attend this meeting.

## INDIANA UNIVERSITY NEWS NOTES

### RILEY HOSPITAL

J. B. H. Martin, administrator of the Indiana University Medical Center in Indianapolis, has announced that a parade of 4,019 children moved through the James Whitcomb Riley Hospital for Children during 1935. "This was the longest and one of the most dramatic parades in the hospital's eleven years of service," Mr. Martin said.

From all but two of the 92 counties of the state came the wistful little patients who made up the parade, Martin's report revealed.

The procession of those seeking release from sickness and affliction was greater by 163 patients than that of 1934. It made its way into a wide variety of departments — into the occupational therapy department, the physio-therapy pool, the oxygen chambers, the Rotary convalescent home, the sun-therapy room, and, of course, into the highly fascinating reading rooms and the dining rooms.

It was a procession that could not be hurried, yet, according to Mr. Martin, the average stay per patient again was reduced, the average being 20.6 days as compared with 20.9 in 1934 and 24.9 days in 1932, the first year the Rotary convalescent home went into full service. The daily average census again went up, reaching 226.8 in 1935 as compared with 221.4 patients in 1934. Reduction in the average stay per patient effected a saving to the counties of \$12 a patient as compared with 1932, Mr. Martin said.

The 1935 admissions brought the total in the hospital's history to 30,111 patients from every county in the state.

Touching on various departments, Mr. Martin reported that the physio-therapy pool, installed September 9, 1935, served 35 patients, most of whom were extreme cases and immediately began to show improvement; the occupational therapy department administered 8,611 bedside treatments and 4,964 workshop treatments to patients in the main Riley unit, and 2,488 bedside treatments and 4,195 workshop treatments to patients in the Rotary convalescent unit; the oxygen chambers treated 134 patients; and the premature baby room, installed in 1933 when the mortality rate averaged 66.6 per cent, cut this rate to 30 per cent.

Among gifts reported were four light therapy lamps by Delta Theta Tau sorority and a mercy autopan bed by Psi Iota Xi sorority.

Among a variety of stories of individual triumphs in seemingly hopeless cases embodied in the report was one of a boy who had lain face down, until recently, but who had endeavored with

one free hand to perform remarkable work in occupational therapy. His persistence and that of the physicians and attendants was rewarded by a definite improvement in his condition in 1935 and the prediction of physicians that he will be able to walk out of the hospital within the next few months.

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The James Whitcomb Riley Memorial Association recently expressed its high regard and deep appreciation of the unremitting and unselfish service toward the Riley association of James W. Fesler, president of the Indiana University Board of Trustees, and Hugh McK. Landon, president of the Riley Association. Mr. Fesler is vice-president of the association.

The Riley Association expressed its appreciation as follows:

"In the crypt of St. Paul's Cathedral in London stands the tomb of General Charles Gordon, 'Chinese' Gordon, killed at Khartoum. On it is inscribed:

"He at all times and everywhere gave his strength to the weak, his substance to the poor, his sympathy to the suffering, and his heart to God."

"And across the aisle lies Sir Christopher Wren, architect of the Cathedral, with the inscription:

"Reader, if you desire a monument, look about you."

"These sentiments may well be applied to those two faithful servants of the Riley Memorial Association, Mr. Landon and Mr. Fesler. Throughout a score of years they have labored incessantly toward the attainment of the objective of the organization—a fitting perpetuation of the name of the beloved Hoosier poet through a service for the under-privileged children, of whom he wrote so understandingly.

"A nebulous idea in the minds of the friends of the poet has, through their efforts, been crystallized into the marvelous structures we see today. A desert spot in the environs of our city has blossomed into an oasis of beauty and restfulness. A Temple of Healing has been erected for the rehabilitation of suffering childhood. In fair weather and in foul, in days of cheer and days of discouragement, in the face of almost insurmountable obstacles, they have spared neither time nor treasure in its behalf.

"These things being true and recognized by all men, therefore, be it resolved that the members of the James Whitcomb Riley Hospital Association express their high regard and deep appreciation of the unremitting and unselfish service which these two faithful disciples have given towards the realization of an ideal."

## SOCIETIES — INSTITUTIONS

### INDIANA STATE MEDICAL ASSOCIATION

#### SECRETARIES' CONFERENCE

The secretaries' conference was held at the Columbia Club in Indianapolis, February second, and was attended by 134 county medical society officers and guests. A list of registrants was published on page 150 in the March issue of THE JOURNAL.

Dr. A. M. Mitchell, of Terre Haute, presided, and his introductory remarks follow:

**DR. MITCHELL:** I am glad to be with you again. I want to thank you for the telegram you sent to me at the close of your last meeting.

This is the tenth year for the secretaries of this state to join together for the purpose of exchanging ideas about the perplexing problem of running a county medical society, and I believe that it takes just this kind of a meeting to make a good county society and, in turn, good county medical societies and a good state medical association.

In the past five years many problems have come up for consideration, many of them national in scope. The problems foremost today are socialized medicine and medical ethics. Socialized medicine, I believe, still is a trump card in the hands of the government and will be pushed forward after the coming election. It is up to the county society to try and elect the right people to office. Party affiliation means nothing. Medical Ethics is an important subject, and if properly handled will solve a great many problems for the medical profession.

We have other problems, too. One is preventive medicine. The care of the health of the people, both preventive and curative, belongs to the medical profession, and if the doctors don't assume this responsibility, some other agency will, and in this state preventive medicine rests on the shoulders of the county medical society.

The care of the indigent sick is another problem; it belongs to the county medical society, and it is their duty to see that this class is taken care of.

The scoundrel is also a problem. He preys upon the doctor. Whenever one presents himself, the county society secretary should be informed.

In our state, we now have a great number of new county medical society secretaries, and probably they have not given serious thought to these subjects, but I am sure that after today, their importance will be recognized.

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R. L. Sensenich, M.D., of South Bend, president of the Indiana State Medical Association, spoke as follows:

**DR. SENSENICH:** I have had the pleasure of attending several meetings of county secretaries in other states within the past year. We have a larger attendance and a wider spread of counties represented. Our meeting is really a compliment to organized medicine. For this noteworthy evidence of your co-operation, I wish to express the deep appreciation of the officers of your state association. I was asked a few weeks ago to give my thought of the purpose and objective of these meetings—what I conceived to be the need for, and possible immediate gain from them. . . . In order to better answer that question it will be necessary to have in perspective the whole scheme of medical organization. I would compare this with the pattern of that remarkably successful American development, the big business enterprise. From the comparison I would define this as an organization of a profession which has to do with the selling of a personal service. If one had a private enterprise which sold a personal service, it would be necessary to have some kind of an organization manned by general and local officers. It would then seem that this kind of meeting is more of a business meeting, a meeting of local executives. It might be likened to a sales conference. The county society is the foundation unit of medical organization and the county

secretary is in one of the most important positions in the whole structure. The state societies are made up of these component county societies and the national organization is a confederation of the constituent state associations. If this is a sales conference of executive officers in which new projects are considered and personnel and sales matters are discussed, what are the outstanding problems? First, in importance, is selling the need of and value of the organization to its own members and those who should be members. No organization can reach the fulness of its objectives if its own members do not believe in it or devote their efforts to its progress. Failure of interest and co-operation in society affairs may mean lack of information as to organization needs. It is the responsibility of the officers of the county society, especially the secretary, to see that members are informed. A disinterested membership is not an impressive argument for sale of society membership to potential members—enthusiasm and activity make membership desirable to others. Second, selling the medical profession to the public. In this, the profession through its individual representative, the personal physician, has demonstrated a lamentable weakness. The public must believe in the medical profession, share in its aims, and be proud of its successes. No sales conference would fail to consider customer reaction—business practices too—and so medical ethics is included.

In many instances medical societies have not accepted their full responsibility. They have been scientific organizations, as they have been for all time, and they have been concerned with medical programs; they have been content to have a membership, to have medical meetings, and to have censors who pass upon certain problems. These constituted largely the activities of the county society. That is not sufficient. The county society today has an interest, or should have an interest in scientific matters because this is the service we sell, but in addition to that, we have a responsibility to co-operate in group action. . . . The state organization cannot make you stronger than you are or step in and solve your problems for you; the national organization cannot do it; you must do these things yourselves. . . . If you have difficulties, a good many times those difficulties are personal. . . . In some societies there are still personal elements, personal factions, which are regrettably unmindful of their common interests. The unwitting foes of effective sales organization. So then great responsibility rests upon the secretary, the continuing officer in the organization. He is the most important man. That is not detracting in any way from the importance of other officers, program committees, and others active in the county societies. But, the secretary is the man who knows the peculiarities of each member. . . . Will he work with this one or that one, will he work only individually or with the group? . . . Almost every individual given something to do may be made an effective member of the organization.

. . . How do we hope to build a better sales organization or improve local situations? These meetings, as I see them, are to afford opportunities for secretaries to discuss their problems, and plan for more effective organization. I hope that this afternoon will furnish answers to many questions and that secretaries will frankly discuss the ways of interesting membership, and ways of inducing men to give some thought to medical problems. Leadership and effective sales organization must be developed in the county society. The Conference of County Secretaries is among the most important meetings held in the State Association.

Mr. Ross Garrett, of Washington, D. C., talked about the "Washington Plan," and he was followed by Drs. O. O. Alexander, of Terre Haute, F. S. Crockett, of Lafayette, and L. T. Rawles, of Fort Wayne, whose papers were published in the March, 1936, issue of THE JOURNAL.

Dr. Frederic E. Elliott, of Brooklyn, chairman of the Medical Economics Committee of the Medical Society of the State of New York, presented a paper on, "New Deal Exploitation of Medical Practice." His paper will be published in a later issue of THE JOURNAL.

"Indiana's Program in Maternal and Child Welfare Under

the Social Security Act," was Dr. Albert McCown's subject. His paper is published on page 163 in this issue.

Dr. C. J. Clark, of Indianapolis, told of the plans of the Committee on Graduate Education.

Dr. Verne K. Harvey, director of the State Division of Public Health of Indiana, talked on, "Policies of the State Division of Public Health." His paper follows:

**POLICIES OF THE STATE DIVISION OF PUBLIC HEALTH**  
VERNE K. HARVEY, M.D.  
INDIANAPOLIS

I believe it is somewhat unnecessary to restate what the policies of the State Board of Health have been in the past or are going to be in the future. An example of new legislation which changes certain laws which vitally concern public health administration and the medical profession in the past two or three years is cited.

I wish to call attention specifically to the new Health Officer Law. One of the speakers this afternoon mentioned that a certain state health council was composed in such a manner that physicians were not represented, and that a law was finally passed through their legislature whereby their public health council did have physicians represented. Prior to 1935 we had in this state an archaic health officer system. Out of approximately 560 health officers, 300 were non-medical health officers. There was nothing the State Board of Health could do about this situation except sponsor new legislation which would place public health problems in the hands of the profession most qualified, namely, the medical profession. We were able, with the cooperation of the State Medical Association, to succeed in getting such a law passed in the 1935 General Assembly. Under the new law, which will become effective January 1, 1938, all town health officers will be abolished, and the duties assumed by the county health commissioner. At that time all health officers must be physicians and their qualifications approved by the State Board of Health.

In addition to the above legislation, I wish to cite the repeal of the old Hydrophobia Law which made it necessary for all indigent patients needing Pasteur treatment to be treated at the Indiana State Board of Health. As a result of the repeal of this law, all patients now can remain in their own communities, and in most instances be treated by their own family physician.

You are all familiar with the present plan of public health education and the promotion of child and maternal health which was adopted about three years ago. Under the present plan county medical societies have assumed the obligation of a large part of educational work in this field, with the aid of the State Board of Health. We realize that there are some weak points in this system, but we are hopeful, with the aid of additional funds which will be supplied through the Social Security appropriations, that it will give us an opportunity to strengthen the plan as it now exists. We do not contemplate any drastic changes, but only hope to augment certain phases of the work. During the summer of 1935 when we felt that the Social Security Act was fairly certain of passage, I asked the Indiana State Medical Association and the Indiana University School of Medicine to appoint two physicians each, who could meet with the Indiana State Board of Health. We chose to call this group the Liaison Committee. The functions of this committee will be to help plan, co-ordinate, and consult in regard to child and maternal health activities in the future under the Social Security Act.

I wish to call the attention of the Secretaries' Conference to the constant need for diphtheria immunization. The diphtheria death rate for 1934, after the state-wide immunization campaign, was 18% lower than it was the preceding year. The indications are now at the end of 1935, that the state statistics will show a slight increase in diphtheria deaths for the past year. I bring this to your attention because there was no concentrated effort made from the standpoint of the state for an immunization campaign during 1935. If the Indiana Plan of Health Co-ordination is to be successful, it will be necessary for us to continue to show good results in the way of reduction of diphtheria deaths. We hope with the aid of Social Security, to be in position

to help the county medical societies carry out this plan more efficiently and more effectively.

There seems to be some confusion throughout the state as to just what the Social Security Act is. It has to do primarily with old age pensions and unemployment insurance. The fact that public health is a part of the act is accidental. It is quite obvious that the public health appropriations were tacked on to the more significant phases of this bill as a means of convenience and expediency.

I would like to point out the difference between public health and the many health schemes and health plans which we hear so much talk of today. Your State Health Department is concerned with public health. It is interested in the masses and not the individual. It is not interested in an administrative way in medical relief. It is interested in public health education and environmental sanitation primarily. Environmental sanitation includes purification of water supplies, proper treatment of sewage, and the sanitation of housing; also the sanitation of milk and food supplies.

In closing my remarks I wish to reiterate that any plans which are worked out in Indiana as a result of Social Security legislation will have very careful consideration by the State Board of Health, and the Liaison Committee. Such Federal funds will be used to augment existing services in the State Board of Health, and to augment the plan of public health education and child and maternal health.

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Dr. E. M. Shanklin, of Hammond, editor of *THE JOURNAL*, talked about, "Your State Medical Journal."

Dr. E. A. Meyerding, of St. Paul, Minnesota, secretary of the Minnesota State Medical Association, read a paper on, "The Relation of the Individual Physician to the County and the State Medical Societies." His paper was published in the March, 1936, issue of *THE JOURNAL*.

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Dr. A. M. Mitchell was selected as chairman of the Committee on Secretaries' Conference for 1936.

The meeting adjourned until 6:30, when dinner was served, following which Dr. Mitchell introduced Dr. E. D. Clark, of Indianapolis, president-elect of the Indiana State Medical Association.

**DR. CLARK:** There are just a few things that I want to say. First, a word about medical education. This is not criticism, but I am giving it in the hope that it will be constructive. It costs a great deal of money—from fifteen to twenty thousand dollars—to become a doctor. It costs much time. Few men get out under twenty-eight or twenty-nine years of age. Most medical schools have, two, three, or four years of premedical work, and then four years of medical work, with an added hospital year. Many schools are contemplating the addition of another year to that. I believe that we have gone far enough. Recently I heard Dean Lewis say, in discussing medical education, that he could pick from his class six or seven men who would succeed in spite of schools; all such men need is a little direction. I think we are in danger of going to seed.

Another thing I want to mention—it has been near to my heart for a long time. I do not believe that we have the proper method of evaluating students who are to study medicine. One man should not do the deciding. There should be another method; I haven't one in mind, but we should study the matter and do something about it. I believe that each state that has a medical school should, insofar as is possible, educate home products first. Undoubtedly brilliant men come from other states, but we have enough in Indiana who will make good doctors.

Today we have discussed many problems. We have a condition that is rather widespread. A number of rural communities are without doctors. I happen to have been born in Economy, Indiana; my father practiced there fifty years. They haven't been able to get a doctor to stick in that community. After a man has spent so much money in education, he wants to get into a larger community, and that is like thousands upon thousands of other communities. These communities are made up of fine, worthwhile people—as fine as I ever expect to meet. They are entitled to good medical

treatment and care, as well as people in the larger cities. A young student and the local minister in Economy have evolved a plan for trial whereby two hundred families are to contribute fifteen dollars each, and give this man three thousand dollars. I do not believe it will work, but something must be done for people of that kind. They comprise a large part of our country, and are just as important as any you can find. I do not know what the solution will be, but there must be one for this problems, or we will have some very irregular medicine.

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Dr. Mitchell then introduced Dr. W. T. Lawson, who has been secretary of the Hendricks County Medical Society since 1883. Dr. Austin A. Hayden, secretary of the board of trustees of the American Medical Association, was introduced, and then Dr. Mitchell introduced Dr. Olin West, secretary of the American Medical Association, who presented his address on, "Today's Medical Economic Problems and the County Society."

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#### THE INDIANA STATE MEDICAL ASSOCIATION EXECUTIVE COMMITTEE

February 23, 1936.

Meeting called to order at 10:00 a. m.

Roll call showed the following present: R. L. Sensenich, M.D.; E. D. Clark, M.D.; O. O. Alexander, M.D.; H. H. Wheeler, M.D.; C. A. Nafe, M.D.; E. M. Shanklin, M.D.; A. F. Weyerbacher, M.D.; Albert Stump, attorney, and T. A. Hendricks, executive secretary.

Dr. Cleon Nafe was elected chairman of the Committee for 1936.

#### Membership Report

Number of members Feb. 21, 1936-----	2,138
Number of members Feb. 21, 1935-----	2,097
Gain over last year-----	41
Number of members Dec. 31, 1935-----	2,802

The monthly statements of Receipts and Expenditures and reports of the Budget for the Association committees and THE JOURNAL for January were made.

#### Bonding of County Society Secretaries

It was moved by Dr. Clark, seconded, and carried, that a recommendation be made to the House of Delegates by the Executive Committee that the question of bonding county medical society secretaries be taken up by the House of Delegates at the South Bend meeting.

#### Treasurer's Office

(1) *Auditing committee to be appointed.* In accordance with the action of the House of Delegates at the Gary session, the president is to appoint three members of the Association as an auditing committee who will go to the bank and check the bonds and the accounts of the Association on June 30. This committee and its work are not to be confused with the annual professional audit made at December 31. The Executive Committee suggests that the members of this committee be Indianapolis men so that they may be called together easily at any time.

(2) *Financial statement from the Metropolitan Trust Company upon Rokey Apartment Bonds.* The State Association holds one of these bonds. The Committee suggested that the Association hold this bond for awhile and not write it off of the books as these bonds seem to be increasing somewhat in value.

#### 1936 Session at South Bend

(1) The Scientific Work Committee, at its meeting on February 2, selected the following outstate speakers to take part in the program:

Arthur C. Christie, M.D., Washington, D. C. (Accepted.)  
Lincoln F. Sise, M.D., Boston, Mass. (Accepted.)  
Frederick A. Coller, M.D., Ann Arbor, Mich. (Accepted.)  
Fred L. Adair, M.D., Chicago. (Accepted.)  
Lee Wallace Dean, M.D., St. Louis. (Accepted.)  
Francis E. Senear, M.D., Chicago. (Accepted.)

E. L. Sevringshaus, M.D., Madison, Wis. (Accepted.)

John A. Toomey, M.D., Cleveland. (Accepted.)

(2) Commercial exhibit announcements are to be sent out within two weeks.

(3) *Scientific Exhibit Committee.* The Committee appointed the following men to serve on the scientific exhibit committee: Ernest Rupel, M.D., director; C. G. Culbertson, M.D., assistant director, and A. S. Giordano, M.D., local director.

(4) Professional medical stenographers are to be used at the session with the same arrangement as has prevailed in the last few years in using the personnel of the headquarters office in taking notes on some of the meetings.

#### Socialized Medicine

(1) Motion made, seconded, and carried that a committee composed of the president, president-elect, and chairman of the Council of the Indiana State Medical Association study the question in regard to the teaching of the socialization of medicine in the universities, and contact the head of Indiana and Purdue Universities.

(2) *Situation at Economy, Indiana.* The president-elect and the secretary were instructed to make a trip to Economy and report upon their findings at the next meeting of the Committee.

(3) Newspaper article telling of the advocacy of health insurance by Dr. Charles Everett Farr, president of the Medical Society of the County of New York, brought to the attention of the Committee.

(4) Article in *New York Times* regarding group practice in Tacoma, Washington, brought to the attention of the Committee.

(5) Article telling of the citation by the State Insurance Department of Pennsylvania of Dr. C. Dudley Saul's clinic, which in effect would make it necessary for such a clinic to come under the insurance laws of the state of Pennsylvania, brought to the attention of the Committee.

(6) Decision of the Supreme Court of Illinois against corporations practicing medicine in that state brought to the attention of the Committee.

#### Social Security Act

(1) Bulletin from Indiana County and Township Officials Association concerning the Social Security Act and urging local home rule administration of the act rather than centralizing the control of this act in the state capitol under complete domination of social service workers, brought to the attention of the Committee.

(2) Minutes of meeting of the Indiana Health Council telling of the discussion of the public health aspects of the Social Security Act by Dr. Verne Harvey, director of the State Division of Public Health, reviewed by the Committee. The high points of this act as they affect public health work in this state follow:

"Dr. Harvey then discussed some of the public health aspects of the Social Security Act. The gist of his remarks was as follows:

"Under Title 6 of the Social Security Act, funds may be provided by Congress to the different states for the promotion of public health. These funds will be allotted on the basis of: 1. Population; 2. Special health needs; 3. For the training of personnel.

"On the basis of population, Indiana can receive \$60,458 from federal funds, to be matched against existing State appropriations. In addition, if the State should see fit to make new appropriations of \$60,458, there would be that much more available from federal funds.

"Indiana cannot show need on the basis of special health problems.

"Our State will take advantage of the opportunity to give public health personnel additional training. It has not been decided as yet how much will be available for this purpose. The money available for training personnel will be used for paying a stipend, traveling expenses to and from the training center, and tuition. Trainees will include physicians, public health nurses, and public health engineers.

"Tentative plans include:

"1. Augmenting certain services in the Indiana Division

of Public Health.

"2. Promotion of full-time county health units, or district units.

"3. Training of personnel.

"In local communities official funds may be used as matching funds against federal money. Money from private agencies cannot be used unless it is placed with the official agency. At the present time it appears that federal funds cannot be used in local communities unless there is a full-time health unit, either county or district."

(3) Report was made in regard to the preparation of the social security bills by the committee of twenty-four members of the General Assembly for presentation to the special session. Special reference was made to the report on the progress of this committee which is to be carried in the Capitol Dome column in the March JOURNAL.

#### Graduate Education

Dates for graduate education meeting set for April 8 and 9 at the Claypool Hotel, Indianapolis. Dates for the Indiana University School of Medicine course set for April 6 to 11. Publicity articles are to be carried in THE JOURNAL; publicity is to be prepared for the press; bulletins are to be sent to the hospitals, and county medical societies are to receive programs and announcements. The Committee is to decide at the next meeting whether or not individual letters are to be sent to all physicians in the state.

#### WPA

(1) *Boone county situation.* The correspondence in regard to this is to be turned over to the councilor of the Ninth District in which district Boone county is situated. This correspondence has to do with the arrangement made by the Boone County Medical Society concerning prepayment for medical service by WPA workers in Boone county.

(2) Bulletin received from the Indiana Hospital Association giving the opinion of the attorney-general concerning payment by township trustees for hospitalization of WPA workers. This bulletin was turned over to Albert Stump with instructions to obtain a similar opinion from the attorney-general concerning the payment by township trustees for medical services rendered WPA workers.

#### Secretaries' Conference

(1) Many letters received, among them one from Dr. Olin West, congratulating the State Association upon the splendid secretaries' conference that was held on February 2.

(2) Letter written by M. A. Austin, M.D., councilor of the Eighth District, concerning suggestions made at the conference, brought to the attention of the Committee.

#### Traffic Accidents

Report to be made at the next meeting of the Committee by Dr. M. N. Hadley, chairman of the Committee on Traffic Accidents, in regard to the situation as it now exists in Indiana.

#### Certification of Specialists

Newspaper article concerning the general program for the examination and certification of all specialists brought to the attention of the Committee. This article quoted Dr. Willard C. Rappleye, dean of the College of Physicians and Surgeons, stated that by 1938 all specialists must be certified by one of the national boards which will work under the American Medical Association.

#### Group Hospitalization

The secretary was instructed to write letters to the secretaries of the Lake County and the Delaware-Blackford County Medical Societies calling their attention to the action regarding group hospitalization of the House of Delegates of the American Medical Association at the Atlantic City session.

#### The Journal

(1) *Exchanges.* The Committee approved exchanging with the following medical journals:

Calcutta Medical Journal, India.

Athena (Biological Clinics), Rome.

Tropical Institute of Moscow.

Ukrainian Akademy of Sciences.

(2) *Historical articles.*

a. Indiana Medicine in Retrospect. Forty pages devoted to this material in 1935. The Committee felt that two pages per month was enough for this material.

b. Dr. Cravens' notebook—historical article. The Committee felt that the Bureau of Publicity should pay for the cost of electrotypes for that article.

#### REPORT OF 32ND ANNUAL CONGRESS ON MEDICAL EDUCATION, MEDICAL LICENSURE AND HOSPITALS. FEBRUARY 17TH AND 18TH, 1936

#### PALMER HOUSE, CHICAGO

*Report of the Council on Medical Education and Hospitals.* Dr. Ray Lyman Wilbur, M.D., Chairman, Stanford University, California. The medical education is necessarily a long one. Educational non-essentials must, therefore, be set aside, but we must retain our basic sciences. However, the presence of the patient in medical education is as important as a cow in a dairy. The patient is the one essential thing and all others are adjuncts. The speaker resents the term "full time man." All professors should discharge their teaching duties first as their most important obligation but should have considerable time at their disposal for whatever purposes they deem necessary.

On the subject of medical economics, Dr. Wilbur said that the idea is growing that the big job is to keep well, and hence the financial support for this must come from the well.

*The Accrediting of Higher Institutions.* Dr. George F. Zook, Ph.D., President American Council on Education, Washington, D. C. Our constitution does not put education in the hands of the Federal Government. The states and private funds help to maintain educational institutions. We have freedom to teach or to learn. This permits some inferior schools to operate but no openly fraudulent ones. The profession should control its teaching and the selection and qualification of students. No profession should be the sole judge of qualifications of licensure of its members. The public insists in having a finger on qualifications of learning and qualifications of licensure of doctors, but is willing to confer with medical men in these qualifications and listen to reason. No political party should operate any educational institution, said Daniel Webster in the Dartmouth College case. Dr. Zook said that complacency sometimes makes medical schools go stale. This must be avoided. Aptitude tests are helping to make sure the examination of licensees. The real problem in licensure is quality of medical graduates. The crediting of medical graduates should be handled by the schools themselves and not the state. The schools determine their curriculum and for their own good they should determine the qualification of their graduates. This will make them more critical. State Boards will lose interest and respect because they have to pass on the work of the worst as well as the best schools. The police functions of the state boards over the medical schools are about over.

Another thing we should have is visitation of board members to schools all over the country, if these schools are of the better standing. Dr. Zook thinks we should have qualitative rather than quantitative standards in judging the schools and their graduates. Thus we are tending more to standards including competent teachers instead of basing our judgment on the number of hours of yearly training, etc. The facilities of the school will be judged in the light of the purpose the school is to serve. During the last two years, the whole accrediting problem has been recast and is now more scientific. This is because of the substitution of qualitative for quantitative criteria. Broad qualitative general criteria are substituting local quantitative criteria.

*Discussion of the paper by Dr. George A. Works, of Chicago:*

He endorses *first*, the statement that accrediting should be the function of the schools rather than the state, and *second*,

the improving of quality rather than the police duties of the state boards, and *third*, accrediting should eliminate quantitative requirements mechanically applied, and should substitute qualitative standards. This, however, will not entirely eliminate quantitative standards. There is no such thing any more as fixed data or standards.

*Consistency vs. Chaos in Medical Education and Licensure.* Walter L. Bierring, M.D., Secretary of the Federation of State Boards, Des Moines, Iowa. The laboratory has given new data which have altered medical education. In 1907 new educational requirements were drawn up by the American Medical Association. The same occurred in 1924 in order to keep the state boards abreast of medical education. Educational principles were recognized over standardized requirements. The increased number of specialties has created a problem and handed over to the profession itself the certification of the competent specialist as compared to self anointed ones. Thus since 1934 we have had the "American Boards." This will result in fewer and better specialists in the future, so anointed by their peers. These boards will certify 25 per cent of all doctors, but 85 per cent of the sick will and can be taken care of by general practitioners. Pre-medical education should be viewed from a cultural rather than a vocational side. Licensing boards and the profession at large must unite in the common purpose of bringing about necessary improvement in the quality of the doctors.

*The Personal Characteristics of the Teacher.* James S. McLester, M.D., President, American Medical Association, Birmingham, Alabama. Dr. McLester said that (1) the teacher must have desirable personal characteristics, (2) that he must have the personal application of spiritual and scientific influence on the student. The above would so influence the student that it would help him meet the social and economic aspects of medicine through its effect on the public.

In discussion of the paper, Dr. Reginald Fitz, of Boston, said that the personal attributes of the teacher had more lasting effect on the student than the scientific facts which the teacher taught.

*Scope and Objectives of the Undergraduate Teaching of Obstetrics.* George W. Kosmak, M.D., New York. Dr. Kosmak said that all obstetrical cases in large cities should be in the hospital under the care of an obstetrician. He cautioned against unnecessary surgery, pointing to the fact that 46 per cent of all maternal deaths occurred after operative procedures. In a southern city where general physicians took care of their private cases, twice as many cesarian sections were done as at a municipal hospital of the same place where the obstetrician handled the cases. In an eastern city twenty cesarian sections were done per thousand cases in 1920. This figure rose to thirty-three per thousand in 1929. The speaker pointed out that the doctor is responsible for over half of the obstetrical deaths, the reason being his incompetence in handling the cases. He urged that obstetrics should be put on a par with surgery and medicine, and that the students should get more obstetrics in medical school. He pointed out that the causes of death in labor are shock, hemorrhage, sepsis and toxemia. He suggested that the medical schools have not balanced scientific theories with actual facts. A thorough knowledge of obstetrics should be required of all medical graduates whether they go into the practice of obstetrics or not. Obstetrics is now practiced as a surgical specialty. It should be taught more at the bedside. Apparently the test tube and the kymograph seem to have replaced common sense and the stethoscope. Medical students should all care for cases for a while in school in the obstetrical district. They should be impressed that obstetrics is a physiologic and not a surgical phenomenon. There should be less surgical obstetrics. Maternal mortality rate should be a test of the obstetricians of a community.

*The Scope and Objectives of Undergraduate Teaching of Obstetrics.* Charles B. Reed, M.D., Associate Professor of Obstetrics, Northwestern University Medical School, Chicago. Dr. Reed gave a plan for obstetrical teaching in Northwestern University. He said that the students need a good short text on the subject, and that they need practice on a manikin. He said that the department head should be a young, enthusiastic man, that the formal lectures should be given by the

senior professor. The student should become dexterous in the handling of obstetrical instruments. He should have a hundred hours of obstetrical teaching in undergraduate medical school. The manikin is the most important part of the teaching. Some schools, he said, do not give good obstetrical teaching. No school should be given a Class A rating if it does not give work on the manikin. At present 75 per cent of the medical schools do not give manikin training.

*Some Observations of the Social Background of Medical Practice in Great Britain.* Richard E. Scammon, Ph.D., LL.D. Distinguished Service Professor in the Graduate Faculty in the University of Minnesota, Minneapolis, Minnesota. Dr. Scammon pointed out that in 1924 in England the average physician's income was 1,500 pounds, the minimum being 900 pounds. In England the old private hospitals have less income now than formerly because their old endowments have decreased earnings now. The taxes on charitable hospitals help to make the hospital problem even harder. England has fewer irregular physicians than here. On the other hand, England has to cope with a lot of health foods such as Bovril, and a considerable amount of health information disseminated through cook books, etc. The officials in minor political positions are not under civil service, but they are safe from dismissal save for gross incompetence. The G. M. C. (General Medical Council) is the functioning body and is responsible only to the Privy Council. At least fifteen of its members must be doctors. Actually only one member of the board is not a doctor. The function of the G. M. C. is to keep a list of practitioners and to maintain a pharmacopœia. The G. M. C. has the power to drop names from the list. The unregistered physician maintains the right to practice but actually if a man is dropped, he finds too much opposition to go on with the practice of medicine. Thus the G. M. C. is essentially a moral code. The rulings of the G. M. C. form the basis of practice in the United Kingdom. These rulings are not enforced by law but by boycott. Dr. Scammon then gave a short sketch of British Medieval medicine and the development of guilds. The great hospitals of London were established during the reign of King Henry VIII by private subscriptions somewhat similar to our Community Chest drives. During the time of Elizabeth, England was divided into ten thousand local boards. Laws governing medical practice are two hundred years old and based on tradition. They are of three classes, first, the Royal College of Physicians; second, the Royal College of Surgeons, and third, the Apothecary Surgeons. The present English medical bill was passed in 1858 and accepted during the next twenty years. "Friendly Societies" took the care of group practice. The panel system of practice was passed during the years of 1907 to 1912, and was done through the influence of Mr. Lloyd George, in the hope of quieting labor groups thereby. Unfortunately, this was not successful. The British Medical Association has raised the social status of the general practitioner, and has always tried to improve the statue of the general practitioner under the panel system.

*Discussion of the paper by Dr. Wilbert C. Davison, of Durham, N. C.*

England has a unique medical problem because of the smallness of the country and because of the peculiar psychology of the people. In England there are five different medical degrees. All doctors come from the upper middle class, a more uniform group financially. While the system is successful in England, that does not say that it would be here. It is successful there, Dr. Davison said, because of the peculiar medical problem in England.

*Instruction of Students and Interns in the Legal, Social and Economic Influence Affecting Medical Practice.* Stanhope Bayne-Jones, M.D., Dean, Yale University School of Medicine, New Haven, Conn. The purpose of medical education is to instruct one how to practice medicine, and also to instruct the physician. Dr. Bayne-Jones thinks that medical students live too monastic a life. He, therefore, wants interns to be at least instructed in the affairs of the world at large. Dr. Sigerist, of Hopkins, in teaching medical history in the light of the social aspects of medicine, shows that we have a relation with the law to medical legislation, to licensure, and to the laws affecting the whole population of the community. The students also have to be instructed in laws covering vital

statistics. They should know more about medical organization and government. The students should be instructed in medical ethics. These subjects cannot be taught to the students formally, but like preventive medicine, that is, by broad general methods. If the student is so instructed, his problem of adjustment when he gets out will be easier.

*Discussion of the paper by Rev. Father Alphonse M. Schwitalla, S.J., Ph.D., St. Louis.* Father Schwitalla said that the teaching of the social aspects of medicine has two functions, first—the student must be stimulated to read along the line of Dean Bayne-Jones' paper; second, he should be taught some measure of guidance in regard to his own personal philosophy and his profession. These things should be taught as an integral part of clinical work. We need a focal as well as a personal philosophy about ethics, social and economic relations. Out-patient department teaching and practice should not do away with personal relationship. This has its origin in the old English law to prevent medical men talking against a lawyer. This will defend medical secrets. Medical students should have positive information about medical legislation. We have the problem of the medical secrets which is overridden by the workmen's compensation law. The exception overrides the general rule. This condition should be investigated.

*What is the Social Objective of the Young Physician?* Nathan B. VanEtten, M.D., Speaker of House of Delegates, American Medical Association, New York. The Speaker thinks that all doctors should have a formal study of economics in college. He thinks that medical graduates have good scholarship and are poor in practical clinical training. He thinks the students have the notion that they have to have too many machines and gadgets in the practice of medicine. It is amazing to walk into the office of recent graduates and realize that their equipment represents an investment of from \$3,000 to \$5,000 in mechanical appliances. This puts too much faith in drug houses and instrument stores. If the young doctor has an idea of making an honest living in the best way he can do it, the future of American medicine has nothing to fear.

In discussion of Dr. VanEtten's paper, Dr. R. L. Sensenich endorses all he says. He thinks the student is a product of (1) the methods of teaching, and (2) the teachers of the school in question integrated with the student's ability. Medicine deals with social conditions as they exist. It is a practical problem.

*Swans Sing Before They Die.* Elias P. Lyon, M.D., LL.D., Dean of University of Minnesota Medical School, Minneapolis. "Swans sing before they die, but for no bad purpose certain persons die before they sing." Dr. Lyons said that the history of the Congress on Medical Education is not yet in order as it is too young. The first problem of medical education is the selection of the candidate. For this we have three criteria: first, college marks; second, ability of the student; and, third, aptitude tests. Even with this we have a manufacturing plant with 25 per cent loss of parts. Using the best methods he knows, he recently picked out one hundred members from the class of 1938. Even then, fifteen failed to come because of economic reasons. Medical education is expensive. Twenty-five per cent loss is a waste. This loss is incurred by the students who failed to pass the first year. Dr. Lyons would get as soon as possible to a three-year pre-medical period, 50 per cent of which is scientific in character. He would lengthen the medical course to five years and get his student out to work as early as possible, thus have the student benefit by the impetus of a year earlier in practice. Dr. Lyons would cut down the number of graduates each year. Well, you say, this cuts out equal opportunity. Dr. Lyons would determine if there is an over-production of doctors and act according to the findings. The American Medical Association wants to keep the open door even though the House of Delegates of the American Medical Association is getting ground between the panels of the wall. If the Supreme Court declares that limitation of numbers is unconstitutional, we could have the constitution changed.

*Function of the Hospital in the Training of Interns and Residents.* J. A. Curran, M.D., Executive Secretary, New York Committee on the Study of Hospital Internships and Residencies, New York. Dr. Curran thinks that New York

is a good place to study internships because half of all the country's interns are located in New York. The Committee has investigated internships in New York. He says that adequate training must be given to new interns by their seniors or they must learn by the expensive method of experience which may be a repetition of mistakes. During the intern period, the reading of medical literature must be stimulated. Members of the staff must appreciate personal responsibility as preceptors. The interns must keep good records. How is the new intern introduced to his work? The intern should have formal instruction as soon as he starts. The quality of the records is in ratio to the care with which the chief-of-staff goes over the charts. The demands of the future practitioner of medicine will guide the content of intern training. Studies by Dr. Fitz, of Boston, show that the quality of the house staff of a hospital is in direct proportion to the endowment of the hospital.

*Conclusion:* The one-year rotating internship is too short. The house staff period should be at least three years, according to the New York interns themselves. The preceptor system in private practice for teaching young men will not meet the demands of the future.

WILLIAM NILES WISHARD, JR., M.D.

#### SOCIETY REPORTS

DAVIESS-MARTIN COUNTY MEDICAL SOCIETY met at the Daviess County Hospital, February twenty-fifth. Dr. L. A. Ensninger, of Indianapolis, presented a paper on "Fractures." Sixteen members were present.

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DELAWARE-BLACKFORD COUNTY MEDICAL SOCIETY members met at Muncie, February nineteenth, for a dinner meeting. Dr. F. G. Wood talked on "Group Hospitalization." Attendance numbered twenty-one.

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ELKHART COUNTY MEDICAL SOCIETY met at Elkhart, March fifth, to hear Dr. Charles W. Mayo, of Rochester, Minnesota, talk on 'Pain in Cholecystitis and Recurring Attacks of Pain Following Cholecystectomy.' Attendance numbered sixty.

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FAYETTE-FRANKLIN COUNTY MEDICAL SOCIETY members met at the McFarlan Hotel, Connersville, March tenth, to hear Dr. Larue Carter, of Indianapolis, talk on "The Diagnosis of the Common Neurological Diseases." Attendance numbered fifteen.

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FORT WAYNE (ALLEN COUNTY) MEDICAL SOCIETY met at the Methodist Hospital, February eighteenth, with the program under the direction of members of the staff. Attendance numbered twenty.

Forty-five attended the March third meeting of the Fort Wayne Medical Society at the Chamber of Commerce when moving pictures showing modern methods of anesthesia were shown.

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FOUNTAIN-WARREN COUNTY MEDICAL SOCIETY members met at Veedersburg, March fifth, to hear Dr. H. C. Wallace and Dr. W. Dodds, of Crawfordsville, present papers on "Acute Abdomen" and "X-ray and Pathology." Attendance numbered nine.

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GRANT COUNTY MEDICAL SOCIETY met at the Hotel Spencer, Marion, February twenty-seventh. Dr. D. R. Ulmer, of Terre Haute, talked on "Fractures."

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HAMILTON COUNTY MEDICAL SOCIETY met at Cicero, February eleventh. Dr. Marlow Manion, of Indianapolis, presented a paper on "Laryngeal Obstruction." Attendance numbered twelve.

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Dr. Walter Stoefller of Indianapolis presented a paper on "Communicable Diseases of Childhood" at the March tenth meeting of the Hamilton County Medical Society. Attendance numbered twenty.

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### INFECTIONS IN THE URINARY TRACT<sup>\*\*</sup>

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Notable among the rapidly changing conceptions of the various phases of medicine is that concerning the etiology and treatment of infections of the urinary tract. Most of the progress made in this field has been based on increasing knowledge of the bacteriology of the urinary tract and the response to various types of treatment.

The clinical importance of demonstrating the presence of bacteria in the urine, and of identifying them as well, has not been fully appreciated until recently. Aside from examination of the urethral discharge for *Neisseria gonorrhoeae* (gonococci) and examination of the urine for bacilli of tuberculosis, the bacteriology of the urinary tract has been generally regarded as being of not much more than academic interest. It was taken for granted that with the exception of the organisms named, the bacteria found in the urine would be either colon bacilli or cocci, and that from a therapeutic standpoint it did not matter which they were. Intensive study of the bacteria involved in infections of the urinary tract has shown, however, that the character of the lesion varies considerably with the different bacteria. It also has been found that the response on the part of bacteria to various agents employed in urinary antisepsis is different. The ketogenic diet, with acidification of the urine, is most efficacious against



W. F. Braasch, M.D.

bacillary infections, while coccal infections respond best to intravenous injections of neomycin. It is important to distinguish between cocci and bacilli in cases of acute infection of the kidney, since coccal infection usually predominates in the renal cortex, and bacilli usually are found when the predominant infection is in the central and collecting portions of the kidney.

Careful identification of the type of bacillus present is also of definite clinical importance. Of the bacilli, the most common invader is *Escherichia coli*, and less frequently *Aerobacter aerogenes*. In addition, members of the genera *Proteus*, *Pseudomonas*, *Alcaligenes*, *Salmonella*, and *Shigella* are discovered in the foregoing order of frequency. Of the cocci, a green-producing streptococcus and *Streptococcus fecalis* are most frequently observed, although members of the genera *Micrococcus* and *Staphylococcus* and hemolytic streptococci also are found. The presence of micrococci and staphylococci frequently is the result of instrumental contamination, although each may be in itself the primary infecting organism. Although all microorganisms in the urinary tracts of children are affected almost to an equal degree by ketonuria, bacillary infections of adults will respond more readily to ketosis than will coccal infections. It is desirable to determine which of the two more common bacilli of the colon group is present, namely, *Escherichia coli* or *Aerobacter aerogenes*. Bacteria such as those of the genera *Proteus* or *Alcaligenes* should be identified because of their tendency to split urea and because of the stubborn resistance of *Proteus* to the usual methods of bacterial elimination. Recognition of *Proteus ammoniae* is particularly important in the presence of recurring formation of renal stones. Although *Proteus* will be eliminated by the ketogenic diet and acidification when the pH of the urine is within normal limits, with markedly alkaline urine it may be impossible to affect it by any form of diet or medication.

\* Read before the meeting of the Indiana State Medical Association, Gary, Indiana, October 10, 1935.

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Bacteriologic study of the blood when acute fulminating renal infection is present often is of great

clinical value. Cultures made of the blood, particularly after acute rise in temperature or after chills, will determine the existence of general systemic infection and also will act as a guide to intravenous therapy. It has been observed that cocci frequently are affected by intravenous injections of gentian violet or of neoarsphenamine, whereas bacillary infection more often will respond to intravenous injections of methenamine or mercuriochrome.

Routine microscopic study of the urinary sediment is essential in every case regardless of the complaint. If erythrocytes and leukocytes are present, a count should be made of their number in the high power microscopic field. It should be cautioned that microscopic examination of the sediment of urine kept in a warm room for several hours may be erroneous, since the large amount of mucus present may alter or conceal the presence of pus or erythrocytes. For microscopic purposes, therefore, examination of fresh urine is preferable. It is difficult to understand why many clinicians continue to pay any attention to microscopic examination of a specimen of urine voided by the female patient, since the urine is so often contaminated by vaginal or urethral secretion. The finding of supposedly pathologic elements in the urine of women is misleading unless the specimen has been obtained by careful catheterization. It should be remembered that the absence of pus cells in a specimen of urine does not exclude bacterial infection. In fact, the cause of frequent micturition may be easily overlooked if pus is absent from the urine or if cystoscopic examination is negative, unless careful search is made for the presence of bacteria. Because of failure to recognize this possibility, in many cases chronic dysuria has been treated wrongly or has been regarded as of functional origin.

A gram stain of a dry smear of the sediment, and examination for the presence of bacteria and for identification of their type, is of the greatest importance, both from a diagnostic and from a therapeutic standpoint. It makes possible determination of whether or not an infecting organism is present and allows a rough grouping as to the type of organism. This method is available to almost all clinicians. Although a negative report usually will exclude the presence of bacterial infection, nevertheless for certainty, culture of the urine should be made in most cases. Only by means of culture can the exact type of organism be determined.

Ammoniacal changes in the urine can be detected easily by the odor given off and may lead to recognition of unsuspected urinary retention. Urine infected with urea-splitting bacteria may have a decidedly ammoniacal odor. The odor which often accompanies necrosis of a vesical malignant growth may be recognized by the experienced examiner.

The clinical importance of the reaction of the

urine has been appreciated to a greater extent in recent years than before. In fact, determination of the pH of the urine should be included in routine urinalysis. If the pH persists on the alkaline side, it may be indicative of infection with urea-splitting bacteria which are frequently found in the presence of lithiasis in the urinary tract and with retention of urine. Determination of the pH is essential to intelligent control of bacillary infection. It is of value as a guide to employment of the ketogenic diet and of coincident acidification of the urine. It has been found that in order to have a bacteriostatic or bactericidal action the ketonurine should have a pH of 5.5 or less.

A group of cases which have puzzled us for a long time are those in which renal infection is of long standing and in which bacteria cannot be found, either by staining the sediment or by culture. After repeated examinations isolated cocci can be found in the stained sediment or in cultures after repeated attempts, including cultures on blood agar and in brain broth. Occasionally anaerobic cultures are necessary to demonstrate bacteria. In some cases all methods fail and, since the infection persists, it must be inferred that the bacteria are so few or of such nature that cultural methods are inadequate. The condition of these patients is often improved following one or two injections of neoarsphenamine, followed by a course of ketosis. Although ketonurine is regarded as specifically bacillicidal, it may be of help in combating coccal infections as well. It is advisable to try both neoarsphenamine and ketosis repeatedly, in sequence or alternating.

A word in defense of lavage of the renal pelvis may not be amiss. In recent years there has been a tendency to discard this method of therapy. Although it was formerly relied on entirely too much, when it was used alone to combat renal infection, its failure should not have caused its complete neglect. It is undoubtedly of aid in the treatment of renal infection with pyuria of marked degree when used in conjunction with methods previously referred to.

The influence of prostatitis on chronic infection of the urinary tract is important. Bacilluria may be eradicated from the urine of the bladder, but infectious secretions from the prostate may cause the bacteria to persist in the voided specimen. Even if the bacilluria is temporarily controlled, the infected prostatic secretion may be the cause of early recurrence. Cases have been repeatedly observed in which urinary infection could not be eliminated without reducing or eliminating coincident prostatic infection. Although the usual prostatic treatment with massage and deep instillations will control prostatic infection in most cases, in many it will fail. Some of these failures will be explained by inadequate drainage of foci of infection in the prostate and it will be necessary to drain these by transurethral resection. Intra-prostatic medication may also be of value in some

cases. Needless to say, other foci of infection, such as infected teeth and tonsils, should be eliminated to prevent recurring infection in both the urinary tract and in the prostate gland.

Failure in eradicating bacilluria by means of ketosis and acidification usually is not the fault of the treatment but of the way in which it has been administered. Correct application of the ketogenic regimen is often difficult and usually requires wide experience, skill, and patience in the dietetic supervision. One of us (Cook) has found that adequate ketonurine will eradicate bacillary infection in 86 per cent of uncomplicated cases. Many urologists have failed to secure adequate ketosis and, blaming the method rather than its mode of application, have given it up. Various substitutes and modifications of the ketogenic diet have been suggested, but as far as we have observed the best results are obtained by applying it according to ratios higher than those originally proposed by Clark and by Helmholz, but based on their principles. At the present time the ketogenic-antiketogenic ratio used is 4:1, which is considerably higher than that originally proposed by the workers named. We have found this increased ratio to produce a better ketosis in a shorter period of time, without any increase in the unpleasant reactions occasionally associated with the diet. Modifications and simplifications in the menus have been made to suit the patient's needs and circumstances. It is sometimes necessary to resort to various measures, such as occasional omission of meals, in order to tide over periods of inability to continue with the diet. Too much cannot be said of the value of regular exercise during the ketogenic regimen. We ask our patients to walk at least two or three miles a day, as this definitely enhances the ketosis and relieves the ill feeling which may accompany the diet. Successful application of the dietary regimen, after all, depends largely on detailed observation and advice of the physician in co-operation with a trained dietitian.

Acidification of the urine, without any other measure, may be sufficient to eliminate bacilli from the urine. For this purpose ammonium chloride or nitrate, 6 gm. daily in divided doses, is usually efficacious in bringing the pH of the urine to 5.4 or lower. Nitrohydrochloric acid has been proposed for this purpose, but in our experience has not proved to be as efficient as the two drugs suggested.

Coincident infection with two or more types of bacteria is frequently observed and may be confusing. It frequently happens that preliminary study of the urine shows only the presence of *Escherichia coli*. After these have been eliminated or largely inhibited, cocci or some other bacilli often appear on stain or culture. In fact, at times it would seem corroboratory of the theory held by some observers that the colon bacillus is a secondary invader and seldom the primary cause of infection. When representatives of many bac-

terial genera are present, it is usually advisable to eliminate the colon bacillus first.

The exact role which bacteria assume in formation of stone in the urinary tract is still uncertain. That they are an important factor is self-evident. To assume that they are the only factor, however, is probably wrong. In the production of some types of stone, particularly those composed largely of calcium phosphate, they undoubtedly have an important part. Cases frequently are observed in which stones of this type are repeatedly formed as long as urea-splitting bacteria, such as representatives of the genus *Proteus* and some cocci, are present. In other cases in which no bacteria are found it is possible that the alkaline urine permits deposit of phosphatic crystals and acidification keeps them in solution and prevents formation of stones. When the bacteria are eliminated and the urine becomes acid, formation of stone usually ceases. In many cases the pH of the urine may be very high and it may be extremely difficult, if not impossible, to overcome the alkalinity by ordinary measures. Continuous acidification of the urine may be accomplished best by prescribing a high acid-ash diet, which may be supplemented if necessary by the administration of ammonium chloride or nitrate in sufficient dosage. As a result of such acidification the formation of additional stones often can be prevented and in some cases the stones can be caused to disintegrate to a variable degree. The latter phenomenon is usually observed with soft stones of recent origin.

We have observed several cases in which the stones disappeared after the patient had followed the ketogenic diet. Undoubtedly the acidification and ketosis resulting from the diet was an important factor in the elimination of bacteria. The importance of vitamins in the diet in preventing formation of stones has not been definitely proved. From the evidence at hand it would seem that acidification and other methods of overcoming bacterial infection are the important factors which affect the formation of stones in these cases.

#### SUMMARY

A careful bacteriologic study in cases of infection of the urinary tract is essential to intelligent treatment. Bacillary infection will respond to ketosis in more than 80 per cent of uncomplicated cases of urinary infection. Intravenous injection of neoarsphenamine will be effective in controlling many cases of coccal infection. Oral medication for infection of the urinary tract usually is of little value. Routine estimation of the pH of the urine is essential in treatment of urinary infection. Acidification of the urine may be sufficient to eliminate bacilli from the urine. Bacteriologic study in cases of stone in the urinary tract may be of clinical value. This is particularly true if the bacteria are those which cause alkalinization of the urine, such as micro-organisms of the genus *Proteus*. Acidification of urine frequently causes disintegration of soft phosphatic stones of recent origin.

## BENIGN TUMORS OF THE STOMACH\*

### GASTRIC POLYPOSIS

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The occurrence of gastric polyposis is relatively infrequent; however, in the last few years many more cases have been described. The first case was reported by Cruveilheir in 1833, and the first complete description was made by Menetrier in 1888. Following that, isolated cases appeared in the literature from time to time. Mills<sup>1</sup> reviewed twenty cases from 1833 to 1923, and since then Strauss, Meyer, and Bloom<sup>2</sup> have reported cases up to 1928. There have also been reports of all the benign tumors of the stomach such as that presented by Eliason, Pendergrass, and Wright.<sup>3</sup>

In 1919 Balfour,<sup>4</sup> whose case was the second reported in America, pointed out that in approximately 69,000 sections (8,000 of which were for gastric lesions) in the Mayo Clinic, his case was the first of gastric polyposis that had been encountered. In contrast, Sielman and Schindler<sup>5</sup> believe these gastric tumors occur frequently, and report that in 300 patients with gastric disease, gastroscopic examinations showed twenty malignant and four benign tumors. The reason for this vast difference in figures may be due to the fact that the definition of polyp includes a large number of tumors—single, multiple, benign, malignant—regardless of histological structure, arising from a mucous surface.

### Etiology

The etiology is not definitely known. The condition is often found in association with hypertensive cardiovascular disease, syphilis, tuberculosis, chronic pleurisy, and atheroma of vessels.

Menetrier's opinion (quoted by Mills<sup>1</sup>) as to the origin of gastric polyposis still holds a prominent place. He regarded the adenomatous hyperplasia as inflammatory in origin, and stressed the fact that the mucosa between tumors always presented evidence of chronic inflammation. In addition he

\* Presented before the Section on Medicine of the Indiana State Medical Association at the Gary session, October 9, 1935.

<sup>1</sup> Mills, Percival: Multiple polypi of the stomach (gastritis polyposa). With the report of a case. *Brit. Jour. of Surg.* Vol. 10, Oct., 1922.

<sup>2</sup> Strauss, A. A., Meyer, Jacob, and Bloom, Arthur: Gastric polyposis. A report of two cases with a review of the literature. *Am. Jour. Med. Sc.* 176:681-690, Nov., 1928.

<sup>3</sup> Eliason, E. L., Pendergrass, E. P., and Wright, V. W. M.: The roentgenological diagnosis of pedunculated growths and gastric mucosa prolapsing through the pylorus. Review of the literature. *Am. J. Roent.* 15:195-322, April, 1926.

<sup>4</sup> Balfour, D. C.: Polyposis of the stomach. *Surg. Gyn. and Obst.* Vol. 28, pp. 465-469, May, 1919.

<sup>5</sup> Sielman, R., and Schindler, R.: Roentgen diagnosis and clinic of diffuse ventricular polyposis. *Fortschritte auf dem Gebiete der Rontgenstrahlen.* 33:191-195, 1925.

called attention to the fact that the arteriosclerosis which was present in his cases was as a contributory factor in the etiology. Mills, however, does not believe them to be inflammatory in the sense of being infective granulomata. He says: "Although a certain degree of round-cell infiltration has been described by Menetrier, it is clear from his excellent pictures that the thickening is due to glandular overgrowth and not to inflammatory exudate. So far the tumor fairly justifies its title of adenoma. On the other hand, it has no capsule and not even a closely defined margin, for it gradually merges into the normal mucous membrane, in which respect it resembles an overgrowth due to a chronic irritation." He is inclined to believe that localized thickening of the mucous membrane is produced by chronic irritation, and in some cases infection, and when it becomes big enough to drag on the stomach wall it would become a polypoid.

Eliason, Pendergrass, and Wright<sup>3</sup> believe these tumors are due to a low grade inflammation of the mucosa, caused by chronic irritation of one of the various forms, that is: chemical, physical, nutritional, functional, or bacterial, producing a local hypertrophy. This, then, gradually increases in size due to the contractions of the stomach, and along with the presence of the gastric contents is dragged on toward the pylorus.

Following Conheim's<sup>6</sup> rule that neoplasms represent developments of embryological rests, Meyer<sup>7</sup> believes gastric polyposis is due to congenital malformation, with other findings as secondary factors. In accord with this idea Brunn and Pearl, quoted by Cameron and Wright-Smith,<sup>8</sup> state that gastric polyposis may be congenital in origin, the polyps emanating from epithelial anlage separated during development, which are later stimulated to growth by chronic inflammatory irritation. Gutzeit<sup>9</sup> is of the opinion that achylia in polyps of the stomach is caused by constitutional inferiority of the stomach glands, and that the polyps and the anacidity are different forms of manifestations of defective development of the stomach mucous membrane.

### Pathology

Menetrier, with the description of the disease, also presented a classification which is still accepted, that is: (1) "Polyadenomes polypeux" and (2) "Polyadenomes en nappe."

The first type comprises polyps with independent attachments, either sessile or pedunculated. They vary in number and may be distributed from the cardia to the pylorus of the stomach, but may be

<sup>6</sup> Conheim, Julius: *Textbook of Surgery*, John Homans, p. 192. Thomas Publishing Company, 1931.

<sup>7</sup> Meyer, J. S.: Polyposis gastrica (polyadenoma). 61:1960-1965, Nov. 29, 1913.

<sup>8</sup> Cameron, C. R., and Wright-Smith, R. J.: Diffuse gastric polyposis accompanying carcinoma of the pancreas. *M. J. Australia.* 2:258-260, Aug. 20, 1927.

<sup>9</sup> Gutzeit, Kurt: Benign tumors of the stomach. *Deutsch Arch. F. Klin. Med.* 153-346-357, 1926.

more commonly found near the pyloric portion. Microscopically there is glandular hypertrophy, glands lengthened, tortuous, devoid of pepsin cells, with the ducts primarily involved and cystic due to the obstruction of the excretory ducts.<sup>10 11</sup>

The second group is relatively uncommon, and usually located in the fundus. The polyps arise from a thick plaque-like base closely packed in rows resembling convolutions of the brain. Microscopically, the glands are vertically lengthened, with only a slight alteration in the breadth, and cysts are either few or entirely absent.<sup>2</sup>

A type described by Hayem (quoted by Mills<sup>1</sup>) is classed as a Brunnerian adenoma; the glands are supposedly the result of misplaced duodenal cells during embryonic life, and the cells, of course, are duodenal in type.

In general, the microscopic picture consists of hypertrophied gastric glands and varying stages of vascular congestion, involving only the mucosa, the musculature and the connective tissue being free.<sup>2</sup>

Grossly, the tumors are more or less uniform, being soft in consistency, gray, grayish brown, or red, depending on the vascularity. They may vary from millet seeds to covering the major portion of the stomach. The surface of the tumors may be covered with a thick egg-white mucus or hemorrhagic areas of ulceration. At times inspection of the stomach will not be very enlightening, but palpation may give the sensation of the presence of food.<sup>2</sup>

#### SYMPTOMS

That the symptoms of gastric polyposis are not characteristic is revealed by the fact that they are unexpectedly found at autopsy or at operation. At times the duration of symptoms covers a period of years and then occasionally may be very brief, with anemia, loss of weight, and strength being the apparent sole manifestations.

Rigler<sup>12</sup> states that symptoms depend chiefly on position, size, location, and character of the tumor, and in general are due to hemorrhage, obstruction, ulceration, or disturbance of gastric function.

In some cases a sense of pressure or weight in the epigastrium, progressing to discomfort and abdominal distress, in other cases abdominal pain are usually the most common complaints. This discomfort may be related to meals, and in other cases may be independent of them; there may be some relief of pain by food intake, and in other cases the pain will not be influenced in any way. Nausea is a very common complaint with some vomiting. Meyer<sup>7</sup> calls attention to the presence of abundant mucus of egg-white consistency in

the vomitus. The presence of blood and pieces of polypi have been recovered from the vomitus and lavage of the stomach.<sup>13</sup>

Hemorrhage occasionally is very severe and it may be due to the marked vascularity of the tumor or ulceration of the mucosa. In some cases there may be only a small amount recovered in the test meal. Blood may also be positive in the stools, but usually not regularly except in extreme cases. Diarrhea is sometimes encountered and may be of marked severity. In addition, there may be anorexia, weakness, weight loss, and anemia in varying degrees of intensity.

In the pedunculated tumors located close to the pylorus there may be evidence of pyloric stenosis or obstruction as reported by Hammesfahr.<sup>13</sup> The symptoms manifested in this condition consist of paroxysmal gastric pain with prostration, vomiting and anorexia which may or may not be associated with anemia and weight loss. Between paroxysms there may be complete recovery.<sup>12</sup>

#### PHYSICAL EXAMINATION

The physical findings are practically negative. In general, the patient is well nourished and in a fair state of health; however, in extreme cases there may be emaciation and marked anemia. In those cases with a tumor mass of considerable size located near the pylorus there may be an indistinctly outlined area of resistance sensitive to pressure with no relation to respiration, but a definite palpable mass occurs infrequently.<sup>11</sup>

#### LABORATORY EXAMINATION

In some cases the complete blood count is well within normal limits, with perhaps a mild anemia, and in other cases the blood picture may present a very marked anemia with a corresponding hemoglobin. The white count and differential are usually not abnormal.<sup>12</sup> Gastric analysis commonly reveals achylia gastrica, and a low combined acidity. Lactic acid may or may not be present. Occasionally free blood is encountered. The characteristic mucus of egg-white consistency may be aspirated in profuse quantities. Pieces of tissue may be recovered in the gastric contents. The stools may be positive for blood at intervals, and occasionally may contain a piece of tumor tissue. The most important procedures revealing conclusive evidence consist of fluoroscopy, x-ray, and gastroscopy, with special reference to x-ray, discussed under the heading of diagnosis.

#### DIAGNOSIS

In making a diagnosis of gastric polyposis, all factors must be considered and all possibilities must be utilized. There are no characteristic symptoms revealed in the case history, with the exception of those cases of prolonged illness. The physical examination may be negative or disclose anemia, and occasionally a tumor mass or a sense

<sup>10</sup> Kirklin, B. R., and Broders, A. C.: Gastric polyposis. *Jour. Am. Med. Assoc.* Jan. 9, 1932, pp. 95-99.

<sup>11</sup> DuBray, Ernest S.: Gastric polyposis (papillomatosis). *Arch. Int. Med.* Vol. 26, Aug., 1920.

<sup>12</sup> Rigler, G.: Roentgenological observations of benign tumors of the stomach. With the report of fifteen cases. *Am. Jour. of Surg.* 8:141-150, Jan., 1930.

<sup>13</sup> Douglas, John: Benign tumors of the stomach. *Ann. of Surg.* Vol. 77, May, 1923.

of tender resistance in the epigastrium. Complete laboratory examination offers the greatest assistance, with the information of achylia gastrica, blood in the stools, and in some cases tumor tissue recovered in the stomach lavage, or stool, and mucus of egg-white consistency. In relation to achylia, Sielmann and Schindler<sup>6</sup> stress achylia with diarrhea, achylia with hemorrhage, and achylia with profuse mucus production as of prime importance in the incidence of gastric polyps.

The roentgen ray supplies very conclusive information. Kirklin and Broders<sup>10</sup> state that if the polyposis is extensive, multiple small indentations along one or both curvatures, together with the rounded or oval transradiant areas within the barium shadow, constitute a picture which is virtually pathognomonic. These authors call attention to the technique of roentgenoscopic examination, including the following points for consideration: (1) barium of the proper thickness; (2) inspection of the stomach as it fills; (3) approximation of the walls by manual pressure; (4) observation of peristalsis of the gastric musculature.

The principal roentgenological findings in gastric polyposis as quoted by Rigler<sup>12</sup> are as follows: "(1) A filling defect which is usually central, round or oval, sharply outlined, smooth in contour. (2) Peristalsis passes through the gastric walls in the region of the defect. (3) The gastric walls are flexible in the region of the tumor. (4) The defect itself is frequently movable. (5) A pedicle may be demonstrated. (6) The defect may be in the duodenal bulb if the tumor prolapses through the pylorus. (7) The lumen of the stomach is not decreased in size. (8) Pyloric obstruction with six-hour retention may be present. (9) The barium shadow of the stomach may show numerous small defects resembling a sponge."

#### DIFFERENTIAL DIAGNOSIS

In the differential diagnosis of gastric polyposis, the following conditions must be considered: carcinoma, ulcer, pernicious anemia, functional dyspepsia, sarcoma, and syphilis.

The unexplained vague digestive symptoms, such as discomfort after meals, a diminution in appetite, a loss of strength and weight in middle-aged or elderly individuals, and a sluggish response to symptomatic treatment, should suggest carcinoma of the stomach. Gastric analysis, and the constant presence of blood in the stools plus roentgenograms should aid in the differential diagnosis. The compound lobulated benign polyp is indistinguishable from carcinoma of a polypoid form,<sup>10</sup> but in general the x-ray findings in carcinoma will consist of a single gastric defect, with an irregular shapeless internal border, absence of peristalsis in that region of the gastric wall, obliteration of the rugae above, and often the reduction of the lumen of the stomach.<sup>12</sup> In gastric ulcer, the appetite is good, the acid content of the stomach is usually high, and there is a response to careful medical

management. Pernicious anemia and gastric polyposis are sometimes confused, because of the severe anemia which may be present in conjunction with the latter; however, in gastric polyposis, the red cell count is not as low as in pernicious anemia. A low color index, the absence of nucleated red cells, and the positive x-ray findings suggest gastric polyposis rather than pernicious anemia. In functional dyspepsia, the history, the obvious causative factors, the absence of occult blood in the stools, the negative x-ray findings, and the response to medical management, with the return of symptoms when care is lax, usually offer ample information for the differential diagnosis. Sarcoma of the stomach must be considered. The symptoms of sarcoma of the stomach may simulate those of gastric polyposis, but it may be distinguished by metastasis in the skin, spleen, or the recovery of tumor tissue in the vomitus or the lavage water. The rarity of the disease and the consideration of the duration of symptoms may help to exclude it. Syphilis of the stomach also makes diagnosis difficult, for the patient may have an achylia, marked emaciation, and present similar x-ray findings over a period of years. However, the repeated negative Wasserman reactions, absence of luetic findings elsewhere, and a failure to respond to anti-luetic treatment are ample reasons to rule it out.<sup>14</sup>

Extra-gastric tumors, foreign bodies, and hair balls bear consideration in every case, but it must also be remembered that any of the above mentioned conditions may be present coincidentally with gastric polyposis. In all cases careful roentgenological examination with accurate interpretation offers the greatest aid in diagnosis.

#### COMPLICATIONS

Carcinoma is sometimes found in conjunction with gastric polyposis, one portion of the tumor being benign and the other part undergoing malignant degeneration. Menetrier, quoted by Kirklin,<sup>10</sup> stated that adenomatous polyps may become malignant. Mills<sup>1</sup> reports four cases of carcinoma in a series of twenty in which polypi were associated with carcinoma. He does not believe they are like secondary carcinomata, but believes they may have started as a malignant transformation of one of a number of pre-existing polypi. Douglas<sup>13</sup> reports a case in his series of a carcinoma of the stomach with a papillomatous growth in the vicinity. J. N. T. Finney and Friedenwald<sup>15</sup> have reported two cases in which gastric polypi had undergone malignant degeneration.

Cases in which stenosis of the pylorus or obstruction of the pylorus due to a polypus of the

<sup>14</sup> Brams, W. A.: Plaque-adenoma of the stomach. Its differential diagnosis and treatment. *M. Clinic North Am.* 8:533-538, Sept., 1924.

<sup>15</sup> Finney, J. N. T., and Friedenwald, J.: Gastric polyposis. *Am. Jour. Med. Sc.* Vol. cliv, pp. 683-689, 1917.

stomach have been reported. Hammesfahr<sup>16</sup> reports a case of intermittent stenosis of pylorus due to a gastric polypus. Wade<sup>17</sup> has reported a case in which intussusception into the stomach and duodenum was due to a gastric polypus.

Another complication which may occur is hemorrhage, which may end fatally, as in a case reported by Douglas<sup>18</sup> due to the degeneration of a benign papilloma.

#### TREATMENT

It is the general concensus that surgical and adequate reconstructive procedures are indicated in the individual cases and often has changed a diagnosis from malignant tumor to one of benign tumor, and given the patient years of good health. Whenever surgical removal is possible, it is usually less difficult than in malignant disease because of the absence of infiltration, ulcerations, and metastases in the regional lymph glands.<sup>14</sup>

Pearl and Brunn quoted by Strauss, Meyer and Bloom<sup>2</sup> used roentgen ray therapy in one of their cases and reported improvement. Douglas<sup>19</sup> used 60 mm. of radium in a capsule attached to a string which the patient swallowed, and allowed to remain in the stomach for six hours, her position being changed from time to time to bring the radium in contact with the various portions of the stomach wall. This did not prove very satisfactory.

#### CASE REPORTS

The following is a series of cases of gastric polyposis:

**Case 1.** Miss R., age forty years, complained of weakness, salty taste in her mouth, backache over posterior thorax, slight loss of weight, and non-productive cough.

Physical examination revealed a pasty looking, poorly nourished individual, with no definite physical findings.

She received supportive treatment and gained weight gradually over a period of six months. In the course of another year she complained of pain below the sternum and in the region of the gall bladder. Following this complaint there was a slow loss of weight, with a persistence of sternal pain, epigastric pain, and weakness. Her physical examination at this time continued to be uninforming. In August, 1932, three years after her first visit, she stated she suffered severe abdominal pain fifteen minutes after meals, stools were hard, there was some nausea and vomiting, and a general fear of eating. Three weeks later the pain was much more severe, and the vomiting had increased in frequency. On August 29, 1931, an x-ray of her

stomach revealed a very mottled appearance, suggestive of intragastric pathology, and diagnosed as polyposis of the stomach.

On September 1, 1931, a gastro-enterostomy was done, and the general condition of the patient was markedly improved. She was not seen again until April 24, 1933, at which time she again had lost weight, and was vomiting about twice a day. On December 4, 1933, it was reported that she died of general metastasis.

**Case 2.** Male, age eighty, general health good until one year prior to first visit. He stated at that time he had attacks of epigastric pain following a full meal, which was then followed by vomiting. At some times there was evidence of blood, and on one occasion he vomited two small masses about the size of small cherries, which were evidently polypi. Gastric analysis revealed total acidity twenty-five, and no free hydrochloric acid. Roentgenological diagnosis was multiple polyposis, clearly defined in the middle third of the stomach on the lesser curvature. On January 14, 1935, a gastro-jejunostomy was done, at which time the stomach wall involved was covered with many small polypi. About one month later a second operation was performed for the correction of the herniation of the mucosa through the osteum.



Fig. 1, Case 3. Tumor size of small egg in pyloric antrum.

**Case 3.** A woman, age twenty-eight, complained of pain in the region of the stomach for two or three years. She obtained some comfort by eating several small meals a day.

Gastric analysis revealed achylia; no blood and no excess mucus was found. Roentgenological examination disclosed a tumor about the size of a small egg in the pyloric antrum, which could be forced through into the duodenum during the examination. On January 6, 1931, a pedunculated polyp was removed, which the pathologist reported as a benign adenoma. The patient at the present is enjoying good health, and there has been no recurrence of her gastric symptoms.

<sup>16</sup> Hammesfahr: Intermittent stenosis of the pylorus caused by a polypus of the mucosa of the stomach. *Centralblatt für Chirurgie*. 58:1183-1184, 1931.

<sup>17</sup> Wade: Intussusception of the stomach and duodenum due to a gastric polypus. *Surg. Gyn. and Obst.* Vol. xvii, p. 184, 1918.



*Fig. 2, Case 4. Several gastric polypi near pylorus.*

Case 4. Man, age 35, complained of periodic attacks of pain after taking food. There was little loss of weight. Gastric analysis revealed total acidity thirty, no free hydrochloric acid. Roentgenological diagnosis was gastric polyposis of the pyloric antrum. He was operated on August 15, 1933, at which time a movable mass about two inches in diameter was removed from the pyloric greater curvature. The pathologist reported an inflammatory tissue simulating a polyposis.

Case 5. Male, age forty-two, complained of frequent attacks of vomiting two or three hours after taking food, occasionally mixed with a little blood. At other times he had considerable pain in the region of the stomach which was relieved by taking food. No gastric analysis was performed. The roentgenological diagnosis was multiple gastric polyposis of the entire stomach extending from the fundus to the second section of the duodenum. In January, 1932, he was operated upon, and small polypi were felt over the entire stomach down into the duodenum. The patient remained well for about a year, at which time all the symptoms returned in a much aggravated form. At this time a large mass was palpable just above the umbilicus. The patient died about two years after operation from general carcinomatosis. An autopsy revealed a large mass involving about one-half of the pyloric end of the greater curvature.

347 W. BERRY ST.

#### DISCUSSION

H. J. PIERCE, M.D. (Terre Haute): Following such a thorough presentation of a relatively rare condition, discussion necessarily is rather limited. I am sure we are all very grateful to Dr. Van Buskirk for calling our attention to this very interesting type of new growths. This is certainly an important possible diagnosis to consider when we are confronted with a patient complaining of vague gastric symptoms.

In my experience this condition is quite rare. The average roentgenologist will probably come in contact with only two or three such cases during his entire practice. The average general practitioner is fortunate to have the privilege of observing even one case of this type.

The roentgen findings of benign tumors of the stomach are so distinctive that a roentgenologist should have no trouble in making the diagnosis of neoplasm even though he has never seen a similar case. With the modern refinements of gastrointestinal examination by x-ray, tumors of the stomach can hardly be overlooked. There are certain characteristics of benign and malignant lesions which are an aid in differential diagnosis. A diagnosis of carcinoma of the stomach should never be made by radiography. Neoplasm of the stomach is a much more satisfactory diagnosis.

The question of malignancy or a neoplasm of the stomach is, after all, not of a considerable amount of importance except for prognosis. If a patient has a tumor of the stomach, the treatment is either surgery or irradiation therapy. If the case is operable, the treatment of preference is, of course, surgery. Surgery with complete excision of the tumor is possible in only a small percentage of the cases seen. Dr. Edwin A. Merritt, of Washington, D. C., has recently presented a series of apparently hopeless cases, some of which have been materially benefited and some restored to health for over two years by heavily filtered, high voltage therapy. These cases showing favorable results were lesions of the cardiac end of the stomach and pars media. Carcinoma of the pylorus, without exception, failed to yield to intensive fractional x-ray therapy. It is important, however, to remember the fact that some of these benign tumors undergo malignant changes. Dr. B. R. Kirklin, of the Mayo Clinic, has observed that the numerous polypi type of lesion rarely becomes malignant, but that the



*Fig. 3, Case 5. Multiple gastric polyposis of the entire stomach extending from the fundus to second section of the duodenum.*

large single polyp type frequently will take on malignant characteristics.

I would like to emphasize what I consider the most valuable point mentioned by Dr. Van Buskirk. These patients usually consult a physician because of a variety of rather vague abdominal symptoms. Most of them have a severe secondary anemia. This is very likely to be the only definite finding in the case. The physician is naturally impressed by the blood condition, and unless he is a very good hematologist he is likely to make a diagnosis of pernicious anemia.

In most of the well organized medical centers every case diagnosed as pernicious anemia is given the advantage of an x-ray examination. Certainly every case of anemia in a patient complaining of vague abdominal symptoms should be examined by a competent roentgenologist.

H. L. MURDOCK, M.D. (Fort Wayne): I do not think we can quite appreciate the x-ray pictures of this condition of polyposis from a diagnostic standpoint. I think a better method to decide whether there is a polyp or not, from the standpoint of the roentgenologist, is by the fluoroscope. In doing fluoroscopy there is a division of the stream of barium that flows down from the stomach, or which splits off; the x-ray does not show such a condition. It is rather hard to point out definite polypi. But in a fluoroscopic examination, especially exerting pressure, the barium flows down and divides, and that is a much better way to diagnose this condition. These so-called polypi usually exist in that portion of the stomach near the pylorus and often give symptoms referable to the duodenum. Another striking thing is that they practically always cause hemorrhage. Occasionally on the surface of the polyp is an ulcer. Dr. Mason reported a woman of sixty-five years in whom blood came from an ulcer on the surface of a polyp, and who had been treated for ulcer for two years; but finally an operation for polypi was done.

In some respects one would be inclined to believe these polypi are benign, but I think they are more malignant than benign. In multiple it is a question whether it is not better to excise the entire stomach to eradicate the multiple polypi. Single polyps are almost always malignant, and you have to excise that portion of the stomach to get rid of the malignancy. The Mayos report that .5 per cent of all stomach ulcers are benign. In polypi there is achylia gastrica. Another point that is sometimes worth remembering is that practically all cases of malignancy at some time or other have had occult blood in the stools. I rather think that the recognition of this particular tumor with vague abdominal symptoms sometimes simulating pernicious anemia requires thorough fluoroscopy, and if you are certain of some stomach disturbance that does not clear up, an exploratory laparotomy is indicated.

## THE OVARIAN AND ANTERIOR PITUITARY SEX HORMONES AND THEIR CLINICAL APPLICATION\*

J. THORNWELL WITHERSPOON, M.D.

INDIANAPOLIS

The presentation of another paper on sex endocrinology should be prefaced with an apology, but a genuine justification for it may be advanced if it aims to summarize, to simplify, and to appraise the confused and ever increasing knowledge on this general subject for those physicians who, through lack of time or opportunity, cannot keep abreast with the rapid strides that are being made in this field. To admit this subject is in a state of confusion is correct, but to discard it entirely, because of this reason, would be as foolish as to deny the usefulness of our knowledge of cancer, its pathology, characteristics, life history, etc., which is also confusing. Therefore, in a very general manner and with apologies for the many dogmatic statements that appear (but which are necessary to keep this paper within limited bounds), I shall attempt to put some order in this chaotic subject of sex endocrinology and to present the clinical possibilities of organotherapy, based on a knowledge of rational physiology.

### OVARIAN HORMONES

#### 1. Follicular hormone.

#### 2. Progestin (corpus luteum hormone).

1. The ovarian follicular hormone is essentially a sexual growth stimulating hormone and is not to be confused with the anterior pituitary growth principle which causes skeletal growth and development. Stimulation by the follicular hormone produces hypertrophy and hyperplasia of all the female secondary sexual organs, including the breasts, and in addition, in animals, brings on estrus. The source of this factor is the secretion of the granulosa cells which line the Graafian follicle. Under its influence the uterine endometrium is changed from the rest stage to that of hypertrophy, while the myometrium is stimulated to hyperplasia and to a state of rhythmic contraction. The immature epithelium of the vagina, three to four cells in thickness, is converted into the adult type, twenty to thirty cells deep, with a cornified surface layer, while the duct apparatus of the breast (similar to trunk and branches of a tree) undergoes hypertrophy, especially at puberty. The period of control of this hormone in women is from the onset of menstruation to ovulation, that is, for about two weeks following the appearance of the menstrual flow.

2. After rupture of the Graafian follicle and ovulation, the corpus luteum is formed, with the subsequent production of progestin, its hormone.

\* From the Research Dept., Eli Lilly and Co. Presented before the Howard County Medical Society, November 9, 1935.

The source of this hormone is supposedly the lutein cells lining the corpus luteum. This hormone, like the follicular principle, acts upon the entire female genital tract and, in general, its action is antagonistic to that of the follicular factor. Its action, however, is synergistic to the follicular hormone in that it presents a one-two type of action; the follicular hormone must have acted first and primed the tissues as it were in order for progestin to be effective. Under the influence of progestin the uterine endometrium is converted from the stage of hypertrophy to the state of secretion, while the myometrium ceases its rhythmic contractions and remains in a state of quiescence. In the breast the glandular apparatus (the leaves of the tree) is stimulated to a secretory storage in the gland cells. The supremacy of control of progestin covers that period from ovulation, the mid-interval stage of the menstrual cycle, to the onset of the menstrual flow, a period of about fourteen days.

#### ANTERIOR PITUITARY SEX STIMULATING HORMONES

1. APH-I, follicle stimulating factor.
  2. APH-II, luteinizing factor.
- Pregnancy urine factor, or pituitary-like (luteinizing) hormone.

APH-I is an ovarian follicular stimulating agent. In immature animals it causes the development of primordial follicles into mature Graafian follicles, with an occasional rupture of these follicles. APH-II brings about luteinization of the granulosa cells of these mature, ruptured, or unruptured follicles. Similar to the relation existing between the ovarian follicular hormone and progestin, there is also a one-two type of action between APH-I and APH-II. APH-II cannot act upon immature follicles; either the animal must be mature (with necessarily mature follicles) or APH-I must have acted previously in order that the influence of APH-II may be demonstrated.

The pregnancy urine principle was originally thought to be of anterior pituitary origin, and on animals and in clinical usage it produces effects similar to that of APH-II, the luteinizing principle. In hypophysectomized animals, however, the anterior lobe implants or extracts produce follicular maturation, ovulation and corpora luteinization, while on similar animals the pregnancy urine hormone, P-U, causes only slight luteinization of theca cells around atretic follicles. It appears that the anterior pituitary gland has to be present in order for this principle to be effective. It was therefore administered to hypophysectomized animals in conjunction with anterior pituitary extracts. The resulting ovarian reactions were remarkable in that the effect was many times greater than the additive effect of the two principles alone. The source of this hormone is thought to be the placenta.

The ovarian reactions following the daily im-

plantation of anterior pituitary grafts or the injection of its extract may be summarized.

#### OVARIAN REACTIONS

1. Maturation of follicles.
2. Rupture of follicles with hemorrhage into them.
3. Luteinization of follicles.

Fig. 1.

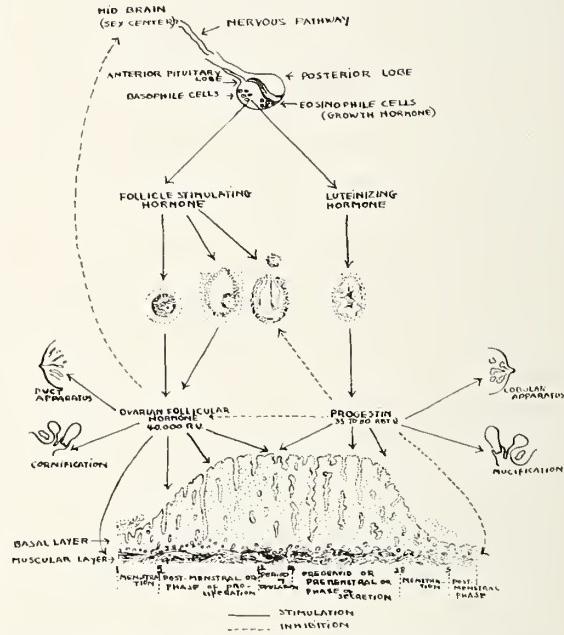


Fig. I represents the interrelationship between the anterior pituitary and ovarian hormones, and their influence upon the endometrium, myometrium, vagina, and breasts.

#### CLINICAL APPLICATION OF THESE HORMONES

Only two sex hormones (commercially manufactured) are in clinical use: (1) ovarian follicular hormone, O.F.H., and (2) the hormone derived from the urine of pregnant women, P-U.

#### GYNECOLOGY

##### 1. Functional menstrual disorders.

A. Amenorrhea. For convenience sake this disorder is divided into three groups, none of which is a separate entity as they overlap into one another. (1) Hypogonadal type. This type of patient presents an individual who has only slightly felt the effects of puberty. Her face is immature, she is small of stature (five feet), and thin (ninety pounds), with little secondary sexual development. The breasts and vulva are small; there is only limited axillary and pubic hair, and the uterus is infantile. The rational therapy for such patients is to administer the ovarian follicular hormone, the sexual growth stimulating factor, with the hope that the patient might mature into the adult type. Upon reaching a more mature development, the menstrual cycle may establish itself spontaneously; if not, the hormones are administered as they naturally occur under the normal menstrual

rhythm, that is, the ovarian follicular hormone (O. F. H.) is given for the first half of the menstrual cycle and is followed, in the last half of the cycle, by progestin. Since this latter hormone is not available commercially, the next best principle, the pregnancy urine luteinizing factor, is given in the hope that it will cause luteinization in the ovary with resulting mobilization of progestin. (2) Hypothyroid type. The patient presents a stocky, heavy set build, is uniformly obese, has small secondary sexual organs and thick, heavy legs and arms with spade-like hands and feet. The hair distribution is not disturbed, but a low B. M. R. is noted. Sterility is generally present as it is in all types of amenorrhea. Thyroid extract is probably the medication of preference. (3) Hypopituitary type. This patient presents an individual of large stature (five feet ten inches), a heavy frame and very fat, with thick fat pads on the shoulders and buttocks. The breasts are large and pendulous, the vulva enlarged, and the uterus about normal size. The distribution of hair is excessive over the face, chest, abdomen, pubes, legs, and arms. With the present commercial hormones, there is no logical therapy for this type of patient. It is a far stretch of the imagination to believe an ovarian secretion or the hormone from pregnancy urine can aid a condition of hypopituitarism. Possibly a true anterior pituitary gonadotropic principle would be of benefit in this condition, just as thyroid extract is an aid in hypothyroidism.

Of all the menstrual problems, amenorrhea is by far the most difficult to treat by hormonal therapy. Fortunately, it is neither a serious nor harmful disorder physically, but psychologically it is disturbing. No matter how disagreeable menstruation may be to a woman, she wants to menstruate if she is in a state of amenorrhea.

B. Functional uterine bleeding or endometrial hyperplasia. This condition generally appears at the two extremes of woman's functional life, at puberty and the menopause. At the latter period the problem of treatment is not a difficult one, as curettage and radium will usually bring on an artificial menopause with cessation of bleeding. At puberty, however, the problem is entirely different and is a serious one. Frequent curettages at this age are very distressing to the girl, and oftentimes check the bleeding only temporarily. Radium is contra-indicated at this age. Hormonal therapy, therefore, has a broad field for action and fortunately its results are very encouraging, although it must be kept in mind that this disorder will occasionally cure itself spontaneously.

Functional uterine bleeding results from the prolongation of the first half of the menstrual cycle, the follicular phase. The follicles do not rupture and therefore no corpora lutea with the progestin hormone are formed. Histologically, the endometrium presents a general lack of uniformity of hypertrophied glandular elements, embedded in a

dense stromal proliferation; the "Swiss-cheese" pattern of the glandular distribution is very characteristic of this condition. Large, dilated, even almost cystic glands are adjacent to small, narrow, non-tortuous ones. The stroma is abundant, dense, and compact, with frequent mitoses of these cells. The entire picture presents an overgrowth of the basal layer of the endometrium at the expense of the superficial layers, whose growth is governed by the hormone of the corpus luteum.

The cause and source of the hemorrhage in endometrial hyperplasia is not known, nor does the degree of hyperplasia always determine the character of the bleeding. Withdrawal of the follicular hormone after the endometrium has been "built up" will result in hemorrhage, so the hypothesis possibly is correct that abnormal and irregular declines in this hormonal stimulation may be the causative factor. The source of the hemorrhage is ascribed to small scattered areas of necrosis in the hypertrophied endometrium or to increased permeability of the blood vessels which permits a massive exodus of blood by diapedesis through a relatively intact surface. That the hemorrhage in this condition is true bleeding and not menstruation is easily demonstrated by the fact that no endometrial debris is cast off and that the blood freely clots, as is not the case in normal menstruation.

The rationale of therapy in this disorder is to bring on the last half of the cycle. The luteinizing factor from pregnancy urine is administered in order to luteinize the follicles with resulting progestin secretion. The use of this hormone for the treatment of functional puberty bleeding often elicits gratifying and even brilliant results. Undoubtedly progestin would be an even better principle, but for the time being this menstrual disorder is well controlled by hormonal therapy.

C. Primary dysmenorrhea, or painful menstruation with no organic cause. This condition is truly spoken of as one of the "bugbears" of gynecology. Many theories as to its etiology, mechanical obstruction, acute uterine anteflexion, hypoplasia of the uterus, psychogenic, and constitutional disturbances have been advanced, refuted, and discarded. A more recent explanation of its etiology is an endocrinial imbalance, resulting in whipping into activity and contraction, by follicular hormonal stimulation, a uterus which has been lying quiet for ten days to two weeks. The pain in primary dysmenorrhea is characteristically of a spasmodic, colicky nature; it begins a day or two before the onset of the menstrual flow, theoretically the time when the corpus luteum begins to degenerate, and when the follicular hormone stimulation again comes into its own. Either the follicular forces are mobilized too quickly or act in too large dosages upon this resting uterus, which has just passed through the progestin phase of the cycle.

The rational hormonal therapy would be to com-

bat this follicular stimulation with its antagonistic principle, progestin. In its place the luteinizing principle is used, again to luteinize the growing follicles with the subsequent production of progestin. The results of this therapy, especially in young girls, are encouraging. Progestin should undoubtedly relieve the pain in a greater number of cases as its application is more rational than that of pregnancy urine hormone.

D. Menopausal symptoms. The cause of flushes, headaches, dizziness, etc., at this age is not known, although an upset chronological relationship between the hypophyseal and ovarian secretions may be the underlying cause. The hypophysis enlarges after the menopause, and the deduction is logical that it takes on a new function. If this enlargement has not occurred before cessation of ovarian activity, the result may be an endocrine disturbance which produces a sympathetic nervous system imbalance, resulting in hot flushes. Certainly this hypothesis holds true in the surgical menopause, when, without warning to the hypophysis, all ovarian activity is removed at once. In such cases the menopausal symptoms are greatly exaggerated over those of spontaneous menopause, and are more difficult to treat.

The rational hormonal therapy for this disorder is to prolong ovarian secretion, by substitutional treatment, until the hypophysis has enlarged sufficiently to take over its new function. The follicular hormone is the principle generally used. The results of such treatment are very gratifying, although it must be remembered that many cases with spontaneous menopausal symptoms cure themselves with sedatives or the elapse of time.

## 2. Functional sterility.

The cause of this disorder (excepting sterility associated with amenorrhea and other menstrual disturbances) must necessarily be a lack of ovulation, even though menstruation may occur. The absence of ovulation may result from intrinsic ovarian disorders or may be due to insufficient anterior pituitary gonadotropin stimulation. The hormonal therapy indicated is to administer the pituitary follicular maturation factor, but not having it available the luteinizing principle is given in order to obtain the combined ovarian effect so that the follicles may be stimulated to rupture.

Up to the present very little clinical investigation has been made on functional sterility. Generally sterility is associated with other menstrual disorders, amenorrhea, menorrhagia, etc., and only infrequently does it occur alone.

## 3. Gonorrhreal vulvovaginitis of childhood.

The infant vaginal mucosa harbors the gonococcus; the adult vagina does not. To eradicate vulvovaginitis of childhood, therefore, all that is needed is a conversion of the infant vaginal mucosa into the adult type. Such a transformation may be brought about by the administration of the follicular hormone, the sexual growth stimulating factor. This hormonal treatment is being

widely acclaimed in the literature, but there are dangers and disadvantages from this therapy.

## 4. Breast changes. Heavy, swollen or painful breasts (without masses).

These symptoms generally appear during the last half of the menstrual cycle when progestin is causing swelling of the breasts by inducing secretory storage in their glands. The treatment indicated is to combat this progestin activity and cause its excretion in the urine by its antagonistic principle, the ovarian follicular hormone. Generally much relief is encountered by such therapy.

## OBSTETRICS

### Threatened and habitual abortion.

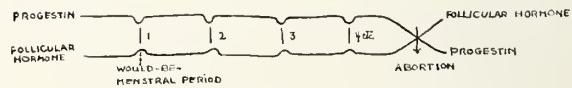


FIG. II

Fig. II represents the ovarian hormonal control during the early months of pregnancy.

Similar to the reversal of hormonal control at each menstrual flow, from the progestin phase back to the follicular, in pregnancy, at each would-be menstrual period, the controlling progestin level tends to decrease and the subservient follicular influence tries to assert itself. When this hormonal relationship is reversed, the follicular factor in the ascendancy and progestin in the descendancy, abortion in the early months of gestation and the onset of labor in the later months take place.

The hormonal therapy in threatened abortion is to administer large doses of progestin in order to maintain its controlling level over the follicular hormone. In lieu of progestin the luteinizing principle is used to induce ovarian luteinization with subsequent progestin secretion. In habitual abortion the same treatment is indicated and must be given periodically at the time of the would-be menstrual periods, since these are the stages in pregnancy when spontaneous abortions are most likely to occur.

Not much clinical investigation has been done on either of these disorders. This is, however, a very rational method of treatment by hormonal therapy for these two conditions. Progestin undoubtedly is the most desirable product to be used in this treatment.

## PEDIATRICS

Undescended testicle. The cause of undescended testicles generally is underdevelopment of the testis. The testicle descends by gravity, not by any physiological act, and, therefore, the more mature and the larger the testis, the more likely it will complete its descent into the scrotum. The treat-

ment indicated to relieve this condition is to administer the pituitary hormones to induce testicular development. In their place the pregnancy urine hormone is used. If the testicle is inside the abdominal cavity, hormonal therapy will be of no avail as the internal inguinal ring is generally closed after birth.

There are at present only a few reports in the literature on the hormonal treatment of this condition. As in the treatment of vulvovaginitis of childhood, administering these hormones before puberty may cause subsequent unpleasant findings.

#### GENITO-URINARY SYSTEM (MALE)

Functional sterility occasionally occurs in man because of insufficient spermatozoan development. Just as the follicle stimulating principle causes maturation of the follicle in the female, a similar hormone causes spermatozoan development in the male. Hence functional sterility in the male should be treated with this hormone. Not having this product available, the pregnancy urine factor is administered. Only a few case reports are found in the literature describing this condition.

#### MEDICINE

Hypo- and hyperthyroid and parathyroid, pituitary (unrelated to gynecological conditions), adrenal, pancreatic, thymal, pineal, etc., disorders are essentially medical diseases and their hormonal therapy bears little relation to the sex hormones except for the anterior pituitary being the "director gland" of all.

#### CONCLUSIONS

A brief review of the physiology of the sex hormones relating to the ovary and anterior pituitary gland has been given, and even more briefly I have outlined the adaptation of some of these theories to clinical endocrinial disorders. As was stated at the beginning of this paper, I have attempted, instead of presenting any single hormonal problem, to give you a bird's-eye view of the whole subject, to summarize it, possibly to clarify it a little, and to appraise it.

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INDIANA'S NEW MATERNAL  
AND CHILD HEALTH WORK  
IS OUTLINED ON PAGE 245.

## RUBELLA (GERMAN MEASLES) AND ITS COMPLICATIONS

HOUSTON W. SHAW, M.D.  
HENRYVILLE, INDIANA

An epidemic of German measles in Clark County during the first part of 1935 presented to me an aspect of this disease not found in the American literature. The report deals mainly with the complications of the disease, because there were no variations in the disease itself; it pursued a mild course, such as is described in any modern textbook on pediatrics.

The epidemic was widespread throughout the county, but this report is confined to two townships, which territory constitutes the majority of my practice. Statistics were not available for the county, because very few cases were reported to the county health officer. This was not done for fear of quarantine, and I believe that this is the general rule with rubella.

In the future, the family physician, together with the local boards of health, should cooperate more in informing the laity of the serious complications which might arise from this disease.

On consulting a modern textbook on pediatrics, I have found the following statement concerning the treatment of rubella: "The treatment of German measles is symptomatic and is indeed seldom needed." This statement is certainly erroneous from my own observations and the doctor should have this impressed upon him so that in the future a few of the complications may be prevented. The group of cases which I am reporting is small, but in proportion to the population of two townships, I believe is fairly representative of the county.

I have no way of reporting the actual number of cases in the townships, but would estimate about three hundred. Of these cases I saw only five in the eruptive stage because after the first case was diagnosed, no one consulted the doctor because of the mildness of the disease. It was only when complications arose that consultation was sought.

The complications reported in this series consists of fourteen cases distributed as follows: bronchopneumonia, seven, of which two developed empyema and one parotitis; lobar pneumonia, five; submaxillary abscess, one; and arthritis, one. In addition there were several cases of rheumatic pains, but no true arthritis except the one reported. Two cases not reported but which may have had complications are mentioned. One, a case of meningoococcal meningitis, occurred three weeks after the measles, and the other, bronchopneumonia, occurred one month after the disease. The latter was complicated by empyema. Both patients had uneventful recoveries.

The brief case reports are included to illustrate the various periods of onset and variations of

treatment instituted by the parents during the disease proper.

#### CASE REPORTS

Case 1. J. H., male, age thirteen years. Three previous attacks of pneumonia. Measles eruption disappeared February 17. No drugs, no bed rest, bronchopneumonia February 20. Recovered March 6.

Case 2. S. H., female, age four years—sister to Case 1. No previous illness. Measles eruption disappeared February 17. No bed rest, no drugs. Bronchopneumonia February 21. Empyema March 5. Consolidation pus and open drainage with rib resection March 10. Recovery and incision healed April 12.

Case 3. D. B., female, age fourteen years. No previous severe illnesses. Measles eruption disappeared February 23. No bed rest, no drugs. Returned to school February 24 and had lobar pneumonia February 27. Recovery March 10.

Case 4. D. J., female, age ten years. No serious illnesses. Measles disappeared February 11. In bed with pain in side and high fever. Patient seen by me February 15, with lobar pneumonia. Recovered February 27.

Case 5. B. A., female, age eleven months. No previous illnesses except cold last winter. Two-day eruption May 14-16. No bed rest, no drugs. Bronchopneumonia May 28 with eruption on May 30. Possibly this was coincident with the measles because this was German measles at this time and possibly former attack was not. Recovered pneumonia June 9.

Case 6. L. M., male, age sixteen years. No severe previous illnesses. Measles disappeared February 17, no bed rest, no drugs. To school February 18. Bronchopneumonia February 19. Parotitis (left) February 26. Recovery pneumonia March 1. Recovery parotitis March 12.

Case 7. J. K., male, age six years. No previous severe illnesses. Measles eruption appeared February 18. Bed rest, force fluids and alkali, acetephenetidene compound. Lobar pneumonia February 20. Patient sent to hospital and expired first week in March. Not personally observed after February 20.

Case 8. J. P., female, age thirteen months. Measle eruption disappeared August 4. No rest, no drugs. Spasmodic laryngitis August 6, bronchopneumonia August 7. Recovered August 18, 1935.

Case 9. D. R., female, age eighteen years. Measles disappeared February 16. To school February 18, and did washing February 16. No bed rest or drugs. Pain in wrist February 20. Marked swelling, redness February 21. Attempted aspiration February 24, but no fluid. Recovered March 14, 1935.

Case 10. T. C., male, age eight years. Measles disappeared March 17. No bed rest, no drugs.

Lobar pneumonia March 22. Recovered March 7.

Case 11. L. V., female, age nine years. Measles disappeared March 4. No rest or drugs. Lobar pneumonia March 8. Recovered March 23.

Case 12. A. V., female, age two years—sister to above. Measles disappeared March 5. Bronchopneumonia March 8. Empyema March 20 and contralateral pneumonia, consolidation pus and closed drainage April 10 after left pneumonia subsided. Frequent aspirations during interval. Recovered empyema May 30, 1935.

Case 13. B. V., female, age five years—sister to above. Measles disappeared March 9. No rest or drugs. Bronchopneumonia March 12. Recovered March 23.

Case 14. J. R., male, age eight years. Measles disappeared May 1. No bed rest or drugs. Severe sore throat and tonsillitis with beginning abscess May 6. Incision and drainage May 7. Recovered May 13.

It is unfortunate that in this series of cases I was unable to obtain nose and throat cultures, but in the rural practice where they occurred it is not routine and of course the outcome of the epidemic was not foreseen. It is hoped that this will be an incentive for a future study by someone where laboratory facilities are available.

A review of the case reports in this series leads to no startling discovery as to the proper treatment of rubella because two patients who developed pneumonia had not even risen from their beds when they contracted the disease. However, it does support my statement that treatment is needed and the public should be informed of this fact. In one textbook of medicine the statement is made, "The treatment for rubella is much the same as for rubeola." This, I believe, would be a proper procedure to carry out; that is, bed rest for at least one week after the eruption has disappeared. In this manner I feel that complications would be lowered as all the complications in this series occurred in less than one week after the disappearance of the eruption.

#### SUMMARY

1. A series of approximately three hundred cases of rubella is reported.
2. Of this group there were fourteen or approximately five per cent of complications with a mortality rate of one or three-tenths of a per cent.
3. Treatment should be the same as for rubeola.
4. Practicing physicians and boards of health should exercise more caution in informing the public of the dangers of the disease.
5. It is hoped that an incentive is raised for further study of bacteriologic and serologic aspects of rubella.

## NON-PENETRATING INJURIES TO THE ABDOMINAL VISCERA\*

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In this era of mass production and standardization, our major traumatic tragedies, at least those associated with modern travel accidents, seem also to have become standardized and to fall into three main groups, in the following order of frequency:

1. Injuries to the skull and its contents.
2. Fractures of the pelvis, with or without visceral injury.
3. Injury to an abdominal viscera.

Injuries to the abdominal organs naturally divide themselves into penetrating and non-penetrating wounds. The first class, associated with an open wound of the abdominal wall, present fewer difficulties in diagnosis, and usually receive prompt surgical intervention. This paper, however, does not deal with the open abdominal wounds, but with the subcutaneous injuries in which there frequently is not even a mark upon the abdomen.

Any discussion of injuries to abdominal viscera divides itself into injuries, first, to the solid viscera where the main symptoms are those of shock and hemorrhage and, second, rupture of a hollow viscous where the additional threat of early peritonitis further complicates the picture. Injury to the mesentery should be included with injury to the bowel which it supplies.

The mechanism of injury is the same in all cases. The injury may be general to the abdomen as in falls from high places, in crushing injuries, run-over accidents, etc., or localized as by a blow from a club, a kick, a fall upon some protruding object, etc. It must be remembered that a hollow viscous ruptures most easily when distended, a relatively trivial traumatism being sufficient, at times, to burst a distended bladder.

In cases of abdominal injury, the liver is more frequently involved than any of the other solid viscera. Johnson, in reviewing a series of 365 cases of subcutaneous injuries to the solid abdominal organs, found the liver injured in 189, while the total of the kidneys, spleen and pancreas was only 176. The preponderance of hepatic lesions is due to several factors, viz., the great size of the liver, its friable nature, and its anatomical position. All these things make it more liable to injury by indirect violence, as by falls from a height, alighting upon the feet or buttocks, or upon the abdomen in falls in water. Moreover the right lobe, lying as it does wedged in between the ribs and the spine and rigidly anchored by its firm attachments, is peculiarly susceptible to crushing injuries, such as run-over accidents, crushing

between cars, blows from a club, or kicks over either the upper abdomen or lower thorax.

In subcutaneous rupture of the liver, the right lobe is more frequently involved. W. H. Battle, writing in *Practitioner*, reviews the combined statistics of Mayer and Ogston which show that injuries to the right lobe bear the relation to the left lobe injuries of three to one. Moynihan states that the right lobe is injured six times as frequently as the left. This ratio is about the same as in the cases reported in this paper, viz., six cases of injury to the right lobe and one to the left. There is, of course, a great variation in the size and shape of the tears, which may be linear or stellate; a part of the substance of the liver may be completely separated, as in a case of the writer's; the liver may have merely a severe contusion with the formation of a hematoma in the liver substance; the liver may be more or less completely torn away from the diaphragm as in a case reported below; or it may be crushed and broken into pulp.

Certain pathological conditions predispose to liver injuries, and among these may be mentioned alcoholism, liver tumors, malaria, syphilis, tuberculosis, and amyloid degeneration. Any local or systemic change which causes enlargement or softening of the liver makes it more susceptible to injury.

Rupture of the liver carries a high mortality. B. T. Tilton, in the *Annals of Surgery*, May, 1915, reported 25 cases collected from New York hospitals for a 10-year period with a general mortality of 44 per cent. Twenty of these cases were operated upon early with a mortality of 40 per cent; the mortality of unoperated cases was 62½ per cent. Terrier and Ouvray report 45 cases, all operated, with a 30 per cent mortality. Among the more severe complications of liver injury may be noted fracture of ribs, rupture of lung, spleen, or kidney, or more rarely, some part of the alimentary canal.

Rupture of the spleen occupies second place in order of frequency and carries a higher mortality in unoperated cases than does rupture of the liver. Because of its friable nature and very abundant blood supply, death from hemorrhage occurs usually within the first 24 hours.

Injury to the kidneys, on account of their retroperitoneal location, does not present so acute a picture as injuries to the other solid viscera. In numerical importance, rupture of the kidney ranks third, being preceded by the liver and spleen, in that order. The kidneys may be ruptured either by a severe trauma or by a comparatively slight one. Most of the ruptures are transverse to the longitudinal axis and all due probably to a force that bends the organ so that either the anterior or posterior surface is rendered sharply convex.

Only a small proportion of renal injuries result in gross intra-abdominal hemorrhage, and in general, the prognosis is favorable. Some of the injuries which cause symptoms are slight and the

\* Presented before the Section on Surgery of the Indiana State Medical Association at the Gary session, October 9, 1935.

patients recover without operation. The more severe injuries, of course, require operation, and in the uncomplicated cases the patients react very favorably. In my own experience with a relatively large number of renal injuries, I have been fortunate not to have had one requiring operation.

Subcutaneous rupture of the pancreas is extremely rare. Practically the only way in which the pancreas can be injured is by a trauma that directly compresses the epigastrium and crushes the pancreas against the body of the second lumbar vertebra. Rupture is usually followed closely by death from shock and hemorrhage, although some cases have been reported with operation and recovery. I have had but one personal experience with pancreatic injury.

Another group of injuries which should be mentioned is injury to the female pelvic organs. I do not believe that displacements are ever caused by any trauma and are always pre-existing, but I have seen one case of rupture of a large ovarian cyst after heavy lifting. The gravid uterus in the later months of pregnancy is easily injured in lower abdominal traumatism. I recently had to deliver a woman at 7½ months by cesarean section 12 hours after a compound fracture of the pubis and ischium.

Injuries to the intestine are the most common traumata to the hollow viscera, followed in order of frequency by the urinary bladder, stomach and gall bladder. The mesentery itself is very frequently affected, either alone or with its subtended intestine. The intestine is particularly liable to injury by direct violence when resident in large scrotal herniae where perforation may be caused by sudden pressure against the pubic spine.

The diagnosis of internal injury without perforation is not always easy; more particularly it is difficult, having made a reasonably accurate diagnosis of visceral injury, to tell prior to operation which organ is at fault. Certain general symptoms and signs are common to all severe injuries; first, pain, usually referred to the region of the organ involved; second, symptoms due to shock and hemorrhage. Tenderness and rigidity are constant and persistent. The tenderness is extreme, and the rigidity usually board-like. Both these signs are important in making an early diagnosis, and both become more general and less localized after a short time.

The symptoms of subcutaneous rupture of the liver are, generally speaking, those of shock and hemorrhage. In any severe injury of the lower right chest or upper right abdomen, especially if the chest shows severe contusion or fracture of lower ribs, the possibility of liver injury should be borne in mind. Quite often, however, the symptoms of shock may be lacking immediately after the injury; in fact, the pulse may be considerably slower during the first few hours. Several writers have mentioned this bradycardia as of diagnostic import, and Finisterer was able to demonstrate it

in twenty animals in which he experimentally produced liver injuries. He also reports two cases of liver rupture which showed pulse rates of 48 and 52.

The most constant symptom is pain in the abdomen. This pain is severe and persistent, usually referred to the right side, and is due largely to peritoneal irritation from escaped blood. Rigidity of the abdominal muscles is fairly constant. This condition also is due to escaped blood and is usually not marked immediately after injury. Tenderness can be elicited in the region of the liver; the ribs of the affected side are less movable; often there is difficulty in breathing, and occasionally there is pain referred to the right shoulder or scapula. When bleeding occurs, the blood usually accumulates in the right iliac fossa. The liver dullness may at first be increased. Immediate loss of liver dullness indicates a rupture of stomach or bowel, with accumulation of gas between liver and abdominal walls. Later disappearance of the dullness means bowel distention due to peritoneal irritation. Jaundice may appear in from two to four days from absorption of bile from the peritoneum. This symptom is more marked and more constant in injuries to the bile tract.

The symptoms following injury to the spleen are less characteristic than those of liver trauma. The symptoms in the main are those of hemorrhage with collapse, blanching of face and mucous membranes, sweating of the face and brows, small pulse becoming quickly worse and more rapid, and usually localized abdominal tenderness.

The symptoms of subcutaneous injury to the kidney vary, of course, with the degree of traumatism incurred. The signs of hemorrhage are not usually observed in early cases because of the counter-pressure which may be exerted by the surrounding tissues. The local signs are hematuria, localized pain, tenderness and rigidity, and frequently swelling about the kidney. The hematuria is almost constant, although in exceptional cases, where the injury is mild and confined to the cortex, and in the very severe cases where the ureter has been torn off, it may be absent.

In rupture of the stomach or intestine, the pain is always intense and immediate, and is usually localized by the patient near the site of the injured viscera. Signs of shock and hemorrhage are usually not prominent unless a large vessel, as in the mesentery, is involved in the rupture. There frequently is early disappearance of liver dullness, and usually an x-ray will show gas below the diaphragm. The later signs are, of course, those of a rapidly spreading peritonitis. One early symptom is the abdomen which is still to auscultation.

In rupture of the urinary bladder, the same general signs obtain as in the other severe injuries. Where the rupture is extra-peritoneal, the primary symptoms are apt not to be so severe as in the intra-peritoneal cases. Severe pain is present over

the bladder region with localized tenderness and rigidity. Inability to urinate, or the passage of small amounts of very bloody urine, are important signs. This also holds for very bloody catheterized specimens.

The treatment of the vast majority of these cases is surgical, and to obtain satisfactory results this treatment must be applied as soon as possible after a diagnosis is made, if the condition of the patient will permit. If you are not completely convinced that there is no serious intra-abdominal injury, and if the condition of the patient warrants, give him the benefit of the doubt and operate. In the treatment of the shock and hemorrhage prior to operation in these cases, care should be taken not to use the large transfusions of 500-800 cc. If a transfusion of this size is used, particularly if given rapidly, blood clots may be dislodged and bleeding increased. If transfusions are employed, it is better to give them in amounts of not over 250-300 cc., and then very slowly, not over 5 to 8 ccs. to the minute. In the absence of a suitable donor, a solution of 6% gum acacia in 5% glucose may be employed.

The technical problems of the operation I shall not go into, except to state that in the majority of cases of ruptured livers, tamponade by gauze, omentum or muscle is both safer and quicker than attempts at suture, although in some cases the suture method of Ouvray may be advantageously employed. The spleen, on account of its friable nature, with its abundant blood supply and degree of mobility, does not readily lend itself to any method of suture or packing, so that splenectomy is usually the only adequate treatment for any major injury to that organ.

In a previous article<sup>1</sup> on rupture of the liver, I reported in detail five cases of subcutaneous injury to that organ. Briefly summarized, these were all adult males, three of them railroad employees, and two farmers. One was crushed between the driving wheels of a locomotive, and two had identical injuries when they were thrown against caboose tables when the long trains in which they were riding were stopped by sudden application of air brakes. One patient was kicked by a horse, and one fell from a roof, striking his abdomen on a pile of lumber. Three of these cases were operated with no deaths. Two were not operated, and one of these, having a complicating chest injury, died.

*Case 6.* Farmer, age 24. Thrust a pitchfork down through hay rack, striking a horse's heel. The horse kicked violently, causing the handle of the fork to strike him in the intercostal notch. He was seen at a hospital about two hours after accident. Abdomen rigid and scaphoid; intense generalized abdominal pain with very marked upper abdominal tenderness. Pulse 100. Operation disclosed a tear three inches long and one

inch deep in the anterior surface of the left lobe, still bleeding actively. Wound was sutured with number three plain catgut after method of Ouvray. Wound closed without drainage. Discharged from hospital in two weeks.

*Case 7.* Boy, age 10. Run over by empty gravel truck, wheel passing obliquely over abdomen. Admitted to hospital in profound shock, skin cold and clammy, pulse small. Patient was put to bed, external heat applied, and given morphine grains 1/16, and 500 cc. of saline with 8 drops of adrenalin solution under the pectoral muscles. He reacted, and one hour after admission, examination showed a very tense abdominal wall. No loss of liver dullness and some dullness in right iliac fossa. Pulse 110. Examination one hour later: pulse 120, increased pain and tension, and increase in iliac dullness. Operation was done about three hours after admission. There was a large amount of blood in the peritoneal cavity, subserous hematoma of cecum and ascending colon, and extensive tear through right lobe of liver, still bleeding freely. Bleeding was controlled by gauze packing. After several stormy days, during which his temperature reached a maximum of 106 per rectum, he began to improve. The packing was removed under nitrous oxide anesthesia on the seventh day and the patient was discharged eighteen days after admission.

The two following cases are illustrative of injuries to the bladder by widely different means:

*Case 8.* Male, aged 64, employe of feed store. History of prostatic trouble of several years duration. Had been catheterized for retention on several occasions. He was lifting a bale of hay when he felt a sudden, severe pain in the bladder region. He passed a small quantity of bright blood, and was then unable to void. Catheterization by the family physician showed the bladder filled with blood. Operation (supra-pubic) disclosed retroperitoneal rupture of the bladder. After two weeks of drainage, prostatectomy was performed with uneventful recovery.

*Case 9.* Female, age 22. Automobile accident. Brought to hospital in ambulance. Severe pain over lower abdomen, with marked tenderness and board-like rigidity. Excruciating pain on movement of legs. X-ray showed five fractures of pelvis. Catheterization revealed blood and blood clots in bladder. Operation: exploration of abdomen showed no blood or fluid in abdomen. Peritoneum closed and reflected upward and bladder opened. Fragment of inferior ramus of right ischium found piercing bladder. Fragment removed, puncture wound in bladder closed, and bladder drained with Pezzar catheter. Gauze packing anterior to bladder to control hemorrhage. Patient treated with swathe and extension. After a rather stormy time, and three months in the hospital, she recovered without disability.

*Cases 10 and 11.* The two following cases have so much in common that they should be reported

<sup>1</sup> Thomson, John: Subcutaneous Injuries to the Liver. *J. Ind. St. Med. Assoc.* Vol. 14, No. 5, May, 1921.

together. Both were elderly males with large scrotal hernias. One patient was kicked by a cow while he was milking, and the other fell over a stump while he was hunting. Both sustained a rupture of the ileum, both were operated early, and both made uneventful recoveries.

*Case 12.* This case shows the peculiar attitude to hospitals and surgery that occasionally persists. A farmer, aged 59, presented himself at my office, stating that on the day previous he had been kicked in the abdomen by a horse. He looked gravely ill. His abdomen was distended, there was obliteration of liver dullness; the muscles were extremely rigid and the abdomen was generally tender. Auscultation with stethoscope showed an absolutely still bowel. I informed him that I thought he had a ruptured intestine and that he should immediately go to the hospital for an operation. He said that he would rather die than go to the hospital, and this he proceeded to do. Autopsy disclosed a rent in the ileum about eight inches above the cecum.

*Case 13.* Male, age 30. Saw-shop employee. He was operating a circular saw which struck a knot in the timber he was sawing, throwing the timber back against his abdomen. Admitted to hospital about one-half hour after injury. Pain intense. Abdomen extremely hard and tender. Operation one hour after injury disclosed a perforation the size of a dime in the lower ileum. Perforation was closed, the abdomen mopped out, and closed. He was discharged from the hospital in ten days.

*Case 14.* Male, drug salesman, age 24. Automobile in which he was a passenger overturned on curve, throwing him against a tree along the highway. He was seen about four hours after the injury. Very restless. Face and mucous membranes pale. Pulse small and fast. Small amount of blood in urine. Extremely tender in left hypochondrium and left flank. Diagnosis: kidney injury with ruptured spleen. Operation was done one hour later by surgeon supplied by employer. Fragmented spleen with massive hemorrhage was found. Splenectomy was done. Recovery was complicated by entire separation of wound, which was due to fact that a large tube drain was used.

*Case 15.* Male, age 25. Automobile race driver. Seven weeks prior to admission to hospital, a racing car which he was driving in Toronto overturned, pinning him beneath cowl of car. He was taken to West Toronto Hospital where he was operated, and was found to have rupture of tail of pancreas, which was sutured and drained through the gastro-colic omentum. After a few stormy days he made a good recovery and was discharged in two weeks. For three weeks he felt fairly well. Two weeks prior to admission he began to have severe pain in the left side with a perceptible mass in the hypochondrium. On examination there was a semi-fluctuant, intensely tender mass in the left hypochondrium, just left of a

well-healed, high, left para-median incision. X-ray after a barium meal showed the stomach pushed up and to the right. The pulse and temperature were normal with a very moderate leukocytosis. A diagnosis of traumatic pancreatic pseudo-cyst was made. Operation disclosed a collection of fluid in the lesser peritoneal cavity behind the transverse meso-colon with dense adhesions between the stomach and transverse colon and rent in gastro-colic omentum. First ten inches of jejunum was densely adherent to transverse meso-colon and posterior abdominal wall. Pancreas tail hard and exposed at bottom of cavity. Rubber tube drain in cavity with large cigarette drain to cavity opening. The cigarette drain was removed on the sixth day and the tube on the tenth. There was considerable digestion of the abdominal wall which was controlled by acetic acid dressings. This patient is still in the hospital. At the present time he is doing well save for occasional cramp-like pain in mid-abdomen associated with audible peristalsis, suggestive of partial obstruction by adhesions.

*Case 16.* This is a case of retro-peritoneal hemorrhage which simulated an intra-abdominal injury. Male, aged 57, fell from roof, striking on buttocks. I saw him in consultation about eight hours after injury. His abdomen was scaphoid and boardlike, and extremely tender. There was no blood in the urine, and the chest sounds were normal. The pulse was 100. On the diagnosis of intra-abdominal injury, operation was performed. There was no blood or fluid in the abdomen. Below the diaphragm on the left side, and extending around the left kidney pouch, there was a sub-serous hematoma. The abdomen was closed, and the patient recovered, the exploratory having done him no harm.

In this whole class of injuries, perhaps the safest procedure is to operate all doubtful cases if the condition of the patient warrants it, and then let the condition found at operation determine the course to be pursued. It is far better to risk an unnecessary operation in a few cases than to wait until your patient is almost moribund.

#### DISCUSSION

W. H. BAKER, M.D. (South Bend): Liver injuries stand first in the group of injuries of the abdominal viscera. They are not so common as one might think. In going over the records of our two hospitals, I was able to find only a few injuries in a number of years. Dr. Grimm gave a list of thirteen cases from five hospitals. There are, no doubt, a great many more injuries than we realize, but those proved by operation are quite infrequent.

In this day and age we see a great many injuries to the abdomen. They are usually complicated by injuries to the head, the chest, the skin, and bony system, and that is what makes these injuries especially hard to treat. Treatment is a

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## TREATMENT OF SOME OF THE MORE COMMON SKIN DISEASES\*

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Dermatology is one of the fields of medicine that receives but little serious attention from the general practitioner. It is true that even the most common skin diseases seen in everyday practice are difficult problems for a great many physicians. This may be due to the fact that many physicians dislike to treat skin conditions, that they take them too lightly, or that they fail to get results because of a mistaken diagnosis. Error in diagnosis and treatment is probably more often due to indifference than to ignorance.

The great majority of physicians are proud of the fact that they know the art of reducing fractures, that they are well versed on the fine points of the diagnosis and treatment of primary pernicious anemia, of gastric ulcer, and of difficult obstetrical problems, yet they are in a quandary when a case of pityriasis rosea fails to produce a four plus Wassermann reaction or an impetigo contagioso continues to spread for a few days in spite of treatment.

It is well to remember that often an apparently insignificant or trivial acne vulgaris is an extremely serious condition, so far as the patient is concerned, and should be so looked upon by us if we are to maintain the confidence that these patients place in us.

The following diseases have been selected for discussion because of the fact that they comprise about fifty per cent of all dermatoses; therefore, adequate knowledge of these few conditions alone would make any practitioner fifty per cent proficient in the practice of dermatology. These conditions are: ringworm, acne, impetigo, scabies, psoriasis, and pityriasis rosea.

Eczema has been intentionally omitted because even a brief discussion of eczema would necessitate much more than the entire time allotted for this paper.

### RINGWORM

Ringworm is a condition due to fungi which gain entrance, live, and multiply in the more superficial layers of the skin. Here they produce intense itching, sometimes painful, well-defined, reddened, scaling areas of various sizes, or the areas may be characterized by pinhead to peazized, tense, deep-seated vesicles or blebs. The skin between the fingers and toes may be white, soft, macerated, and easily removed. In all of the various types itching, burning, and pain are often

troublesome. It is probable that no disease of the skin is of more practical importance and it is one of the biggest problems in public health work.

The prevention of ringworm is a phase of treatment that has been neglected and is important since the disease is very prevalent and oftentimes notoriously rebellious; also, the fungus is highly infectious, especially for those who are susceptible.

The long list of remedies, including various proprietary preparations, suggested for treatment of ringworm infection is evidence that we have found nothing specific. The greater number of them are unsatisfactory and the results so variable that it is difficult to say in any given case what combination will be of most value. There is no method of treatment that assures ideal results. A method helping one case and not another can perhaps be explained by the susceptibility of the patient to the infection and the refractivity of the organisms.

Treatment consists of the repeated exfoliation of the skin (making the environment a less likely place for the fungus to thrive), together with the antiseptic effect of the preparation sufficiently strong to destroy the fungus.

Bearing in mind the various clinical aspects, it is best to proceed with a sort of routine treatment. Mild wet compresses and soothing applications should precede the use of stronger remedies, since the resulting irritation from their use seems only to aggravate the condition.

The mildly astringent lotions of boric acid, a one per cent solution of aluminum acetate, or a five per cent solution of potassium permanganate, either as repeated compresses or by soaking the hands or feet several times daily, fifteen minutes each time, relieves itching, reduces inflammation, and softens the skin, thereby hastening the rupture of the vesicles. If vesicles are numerous, large, and tense they should be drained. The addition of menthol, phenol or camphor may be added to the selected solution if itching is especially intense. After several days the condition usually subsides, and the stronger keratolytic medication may be used in gradually increasing strengths. Salicylic acid in an ointment base or in lotion is most popular. The much used Whitfields' ointment or a modification of it is recommended. Lately, phenylmercuric nitrate has been gaining in popularity. After the chosen desquamative medication is applied once or twice daily, for from three to seven days, the resultant desquamation is obtained, after which soothing applications are again of value. Calamine lotion or ointment, boric acid, or zinc oxide ointment are indicated. When the condition subsides, the frequency of the application may be reduced to every second or third night for several weeks, while one of the many dusting powders (for instance, equal parts of tannic acid, boric acid, and zinc oxide) should be used between the toes and in the stockings and shoes during the day.

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In some of the more obstinate cases of ringworm of the hands and feet, x-ray in fractional doses is of value, and after other remedies have failed it is worth a trial. Roentgen therapy should not be looked upon as routine treatment, for in the greater number of cases it is of less benefit in ringworm of the hands and feet than in similar eruptions due to other causes.

Ultraviolet light may occasionally be of some benefit in the vesicular and intertriginous varieties. The results are palliative and soothing. The use of ultraviolet light should be combined with other remedies, for alone it is disappointing.

The use of trichophyton extract intradermally opens a new field both in regard to the diagnosis and treatment, and it soon may be our most valuable method of treatment in all types of dermatomycosis.

There is no doubt that disinfection is a valuable aid, not only from the standpoint of prophylaxis, but as a part of the actual treatment. It is very probable that more permanent results would be obtained if every patient were instructed concerning its use.

Disinfection of all infected materials with formaldehyde should be undertaken several days after beginning treatment and should be carried out at weekly intervals for several weeks after the condition is clinically and microscopically cured. Blotting paper moistened with formaldehyde and placed in the toes of the shoes at night and the wearing of different shoes on alternate days is effective and easily done.

Periodic disinfection of locker rooms, gymnasiums, and shower baths would help greatly to reduce the incidence of ringworm infection of hands and feet.

The treatment of ringworm of the scalp is a serious problem since it is resistant to topical treatment. Epilation is indicated and can best be done by x-rays or thallium acetate. These methods of treatment should always be looked upon as dangerous remedies and must be undertaken with the greatest caution.

#### ACNE VULGARIS

Acne vulgaris runs a chronic course over a period of months or years and the early, proper, and persistent treatment shortens the course and minimizes scarring.

The milder cases of acne are so common among adolescents of both sexes that its presence must be considered almost physiologic.

The exact cause of acne is not known. The etiology has to do with more or less important contributing factors that are sometimes difficult to recognize and correct. It is encountered more often in those individuals who present an inherited predisposition for it. Dietary indiscretions, constipation, digestive, endocrine, and menstrual disturbances and focal infections are often etiological factors. However, a careful search of many of

these patients assures one that they are apparently in excellent health.

The successful treatment of acne vulgaris depends upon the treatment of the patient as an individual and not as just another patient. Locally, the object of treatment is to achieve a slight, superficial exfoliation of the epidermis which opens the papules and pustules and removes comedones. The patient is advised to wash the face thoroughly with soap and warm water, and at night after this is done, hot, wet compresses of boric acid solution are applied to the face for five to ten minutes. The blackheads are then gently removed with a comedone extractor and all pustules are evacuated.

A lotion containing a form of sulphur or a greaseless cream containing sulphur, such as the properly prepared lotio alba or Magma sulforata ointment, is applied generously and allowed to remain over night. It is removed the next morning by washing with warm water.

The use of autogenous vaccine, staphylococcus toxoid, and bacteriophage have met with indifferent results. Their use on the whole has been disappointing in the treatment of acne vulgaris; however, very satisfactory results with all of them have been obtained in the markedly pustular cases.

The majority of dermatologists agree that x-ray therapy is the most reliable, efficacious, and satisfactory of any one method of treatment. The patients must be individualized and carefully chosen. The best results are obtained in older patients, those between the years of twenty and twenty-five, where the final success of its use cures about seventy-five per cent. The use of x-ray therapy for acne vulgaris is contraindicated in adolescence.

Roentgen therapy is not a cure-all, and since recurrence is prone to develop in about twenty per cent of the cases its use should be very carefully undertaken. X-rays are of greater value when other indicated local and systemic treatment is employed, and if proper precautions are taken the percentage of recurrences is lower.

In regard to the general treatment of acne vulgaris the local and constitutional etiology should be searched for and, if possible, corrected. Focal infections, menstrual disorders, gastro-intestinal disturbances (including constipation), endocrine disturbances, and hygienic environment should be carefully studied and treated if indicated.

Although there is no scientific evidence that indicates a specific diet in acne vulgaris, and it is admitted that the disease can never be cured by diet alone, the elimination from the diet of chocolate, candy, pastries, fried foods and condiments is advised. It is well to keep in mind that certain drugs, especially those containing iodine or bromine, may aggravate or prolong a case of acne vulgaris. I have seen several cases of acne rapidly improve after iodized salt had been removed from the diet.

## IMPETIGO CONTAGEOSO

The well-known and sometimes aggravating impetigo develops usually about the lips, nose, and chin. In the new-born infants, especially prematures and those of low vitality, the disease may spread rapidly and carry with it a rather high mortality rate. Impetigo is the result of infection usually of the staphylococcus and streptococcus. It is infectious and auto-innoculable, being transmitted by contact or through the medium of books, pencils, powder puffs, towels, money, etc. All patients should be informed of its infectiousness and advised to wash thoroughly the hands with soap and water after handling the lesions.

It is very important that the patient be instructed to remove the crusts, for the medication should be applied directly to the denuded surface. This is best accomplished by the liberal use of soap and water or olive oil, after which the crusts are removed mechanically and all vesicles or blebs opened under sterile precautions. The use of warm three per cent boric acid solution twice daily, ten minutes each time, and the frequent application of a three to five per cent ammoniated mercury ointment, without a dressing, will cure the majority of these cases.

In several instances when the disease was resistant to the above named routine I have had better results with merthiolate ointment than with ammoniated mercury ointment.

Alibour water also has been used to good advantage. It is clean and efficient. Rx.:

Zinc sulphate	0.6
Copper sulphate	2.1
Camphor water	100.0

Sig.: Dilute one part to six of water  
and apply two or three times daily.

The use of ultraviolet light is recommended. It is a convenient and valuable adjunct method of treatment.

## SCABIES

Scabies is mentioned because poor results are often obtained since proper instruction is omitted or the patient fails to co-operate. Also, one must keep in mind that occasionally the trauma from scratching results in eczematous changes and suppurating processes such as pyoderma and impetigo, so that the original scabitic inflammation may be masked and the proper attack upon the eruption is ineffective.

The patient should bathe for twenty minutes in hot water with a generous supply of soap, after which a five per cent sulphur ointment is thoroughly rubbed into the skin. The ointment must be applied to the entire trunk every night for four nights. The underclothing that is put on after the first application of ointment should be worn until the treatment is completed. No baths are taken in the interim. On the fifth day a second bath is taken and the underclothes, night clothes, sheets and pillow slips should be sterilized by boiling.

Occasionally, a second course of treatment may have to be undertaken and, if so, a more mild concentrated preparation of sulphur should be employed, always keeping in mind the possibility of a sulphur dermatitis developing in sensitive individuals in whom, if treatment is prolonged, there will result a condition in which the effect of medication is worse than the original disease. A dermatitis of this nature is best treated by soothing starch and soda or oatmeal baths and the local application of calamine lotion or equal parts of boric acid and zinc oxide ointments.

Ravaut and Mahieu<sup>1</sup> have taken advantage, in the treatment of scabies, of the fact that the addition of an acid to a solution of sodium thiosulphate results in the precipitation of colloidal sulphur grains, and they report excellent results. After bathing with soap and water the patient applies a forty per cent solution of sodium thiosulphate, and while the skin is still moist a four per cent solution of hydrochloric acid is applied. A sulphur deposit forms on the skin and is allowed to dry. The applications are again repeated. This procedure is undertaken for several days in succession, which is all that is usually necessary. The method is harmless, rapid, cheap and effective. I have recently used this treatment in several cases and have been more than pleased with the results.

## PSORIASIS

In psoriasis, the lesions vary in number, size, shape and distribution. The elementary lesion spreads in the periphery and may coalesce with other nearby lesions to form larger areas of various shapes and configurations. Most cases present lesions in various stages of development—from pin-head to palm size, and varying from two or three to several hundred. They spread rapidly or slowly and are not symmetrical or bilateral. Psoriasis selects the extensor surfaces of the elbows and knees. It may, however, attack any part of the body surface.

When relapses occur it is advisable to begin treatment at once, to limit the extent of the outbreak and to lessen the tendency to transform the condition to an inveterate psoriasis.

Every rapidly spreading case of psoriasis should be treated with mild remedies. I strenuously warn against the application of strong remedies, especially chrysarobin and tar, as well as irradiations of any kind. Arsenic in any form should be withheld in the acute, exacerbating cases. Daily soap and warm water or, perhaps better, starch or oatmeal baths are advised to soften and remove the scales, after which the application of five per cent sulphur in benzoinated lard or a three per cent liquid aluminium acetate in petrolatum soothes the eruption to a receptive mood.

In the more chronic cases stronger remedies are indicated. Chrysarobin, either in collodion or as

<sup>1</sup> Ravaut and Mahieu: Sodium Hyposulphite in the Treatment of Scabies and Various Cutaneous Conditions. *Bull. franc. de dermat et syph.* 41:135 (Jan.), 1934.

an ointment, is perhaps one of the most popular. It has two disadvantages: its staining properties and its ability to cause a severe dermatitis and conjunctivitis. Because of the latter it should never be prescribed unless the patient can be kept under strict observation. It should not be used over large areas since it may through absorption cause toxic symptoms.

As an ointment, chrysarobin may be employed in strengths of from two to ten per cent; the milder concentration, to begin with, is rubbed well into the lesions twice daily for from four to seven days, after which a rest period of three days is recommended to avoid the possibility of a dermatitis. Chrysarobin should never be used about the face or scalp.

Various preparations of tar in lotions or in ointments are of value in the treatment of psoriasis, and as an ointment should be rubbed well into the lesions twice daily. Rx.:

Crude coal tar	4.0	Oil of cade	16.0
Zinc oxide	30.0	or Ac. salicylic	3.0
Petrolatum qs.	120.0	Petrolatum ad.	120.0

General irradiation twice weekly with the ultraviolet light is of distinct value as an adjuvant measure to local and systemic treatment.

The use of the x-ray is one of the most valuable methods of treatment in the thickened, inveterate patches, since these lesions usually clear rapidly when other methods have failed. However, since psoriasis is a disease that is prone to recur, the repeated use of the rays during recurrences may lead to a more or less severe radiodermatitis.

Many remedies have been recommended for internal use. Of these arsenic, either as potassium arsenite or as arsenous acid in pills or sodium cacodylate, is most widely used. Arsenic should never be employed in the acute, rapidly spreading cases, and should only be used in chronic cases after other measures have failed. All physicians are aware of the possible dangerous sequelae resulting from the protracted or too frequent use of arsenic.

In the majority of cases, the character of the patient's food is of trivial importance.

#### PITYRIASIS ROSEA

I want to mention pityriasis rosea because I have been surprised at the number of cases that have been misdiagnosed with consequent poor results from treatment, because the disease apparently is easily irritated. In about eighty per cent of the cases, the disease begins with the mother patch (sentinel spot) located usually about the trunk. This solitary lesion varies in size from that of a dime to a fifty-cent piece. It is usually non-itching, round or oval, well defined, brownish red or chamois colored, and presents fine bran-like scales. After from four to ten days an eruption develops most abundantly about the trunk, characterized by numerous, slightly scaling, well circumscribed, oval, salmon-colored lesions. These

lesions begin as macules or papules, spreading in the peripherae, with slightly raised borders and arranged with their long axis parallel to the cleavage lines of the skin. The disease is self limited, usually clearing in from three to eight weeks, and seldom recurs.

As a rule, pityriasis rosea is easily diagnosed, but may be confused with psoriasis, the maculopapular syphilids, tinea circinata and seborrheic dermatitis.

The eruption should be treated mildly. Daily bran or starch baths are of value. The use of soap is condemned. Soothing lotions such as calamine lotion, or mild protective ointments such as boric acid, zinc oxide or a two per cent sulphur ointment, applied twice daily, is all that is usually necessary.

The use of the ultraviolet light is of benefit and is advised routinely. Strong or irritating lotions or ointments should never be used in treating pityriasis rosea.

#### SUMMARY

1. It is well to make the correct diagnosis before prescribing treatment, and if a diagnosis is not made, treat the condition soothingly.

2. Learn when to soothe and when to stimulate: soothe the acute; stimulate the chronic.

3. Starch baths (alkaline or emollient) should be employed in generalized itching eruptions.

4. No symptom is trivial.

5. A carefully taken history may be of more value than all the lotions or ointments that might be employed.

408 SHERLAND BLDG.

#### DISCUSSION

JOHN ERIC DALTON, M.D. (Indianapolis): There are just a few things which I feel often need some emphasis, and one is the arrival at diagnosis, for in order to treat intelligently we must first diagnose properly. For a long period skin diseases were looked upon as processes involving solely the organ of the skin. Fortunately, that very limited view has passed, except with respect to some of the definitely recognizable local external infectious conditions. We know that the skin can be and very often is the mirror of an underlying constitutional disease. Knowing these things, the patient must be often subjected to a careful physical examination which leads on into more specialized studies of systems and laboratory procedures as are indicated to the examiner. The cutaneous examination must be made in good light and very frequently with the patient fully stripped so that all skin surfaces, mucous membranes, hair, and nails are accessible to view. In this we note the size, the shape, the color, the distribution, the type of primary lesion, and the type of secondary lesion to arrive at our final conclusion.

In treatment it is of prime importance to start with mild medicaments and watch the individual's tolerance to the drug as we build up to attain the clinical result we are seeking. Many patients

end in the dermatologist's office not because the selection of drug has been bad but because its use in strengths beyond the tolerance of the individual has led to irritational symptoms frequently interpreted as a progression of the disease.

Along this same line I would like to caution against the growing tendency to use proprietaries. Many preparations have been circularized and detailed which are said to be of value in certain entities, though no satisfactory bibliography can be cited to substantiate these claims. In some cases a formula does not accompany the preparation, though even when it does, physicians, sometimes in their haste, fail to acquaint themselves with the ingredients or the percentage composition of these materials and proceed in a blind usage of them. There is no reason why we physicians should not write our own prescriptions and certainly, in that way, our patients should have more intelligent therapy.

There was a time when a large percentage of all dermatological cases almost routinely received arsenic in some form. We know that a fair number of these people, so treated, either through excessive use or due to individual sensitivity to the arsenic, developed further cutaneous trouble manifested by keratosis, pigmentations, and epithelioma. Thus I should like to speak for individualizations all the way through rather than routine therapies, and to caution against the haphazard use of arsenic.

HAROLD F. DUNLAP, M.D. (Indianapolis) : It is rather futile for one engaged in the practice of internal medicine to attempt to discuss such a paper, as the subjects under consideration are almost purely of a dermatologic nature. However, there are several phases of the subject, from the standpoint of general medicine, which warrant careful consideration.

All of these cases should be most carefully studied for evidence of underlying systemic disturbance which might possibly act as an etiologic factor in aggravating the dermal lesion. Quite frequently systemic diseases will show dermal manifestations, and this may be the prominent symptom which brings the patient to the doctor, though he may be suffering from a much more serious systemic disease. This I feel is especially true in dealing with diseases involving the endocrine glands. We are all familiar with the relationship of acne to puberty, and with the tendency to develop infections of the skin in uncontrolled diabetes mellitus. In disturbances of the pituitary, the adrenals, or thyroid, dermal manifestations are very prone to occur. In the adrenal cortex syndrome, not only acne, but also trophic disturbances involving the skin and nails are usual occurrences.

Dermal manifestations occur very frequently in the course of hyperthyroidism. Recently I saw a woman suffering from a severe and protracted urticaria who had been treated by several prominent dermatologists without benefit. When it was discovered that she was suffering from mild hyperthyroidism, its alleviation by surgery relieved the urticaria. Again, in hyperthyroidism we see papular eruptions over the chest which are quite characteristic of the disease. Also, acneform eruptions usually occur in cases of hyperthyroidism under treatment with iodine. We must always think of the possibility of an eruption being due to the administration of some drug, and this is especially true of iodine and the bromides. Of course we must have in mind the acute infectious diseases with dermal manifestations, and also we must consider the possibility of these dermal lesions being factitial in nature. The latter is especially true in the nervous individual who complains of dermal lesions; sometimes, by careful history taking, we find these are self-inflicted.

Some of these cases may be of an allergic nature, and here the patient frequently has an idea what is the causative factor, and again a careful history may help in solving the problem. Certainly the intradermal skin tests for food allergy are not of much value, and we must arrive at the causative agent largely through exclusion and through the use of an eliminative diet.

#### NON-PENETRATING INJURIES OF THE ABDOMINAL VISCERA

(Continued from Page 232)

little different, however, in injuries to the liver from that in injuries to other parts of the body. In other injuries you usually wait for shock to subside, but in injuries to the liver it becomes necessary to do surgical treatment during shock. Usually the pulse is very high and the blood pressure low, associated with a typical picture of hemorrhage and shock. If you wait until shock has disappeared, you will sometimes lose your patient. It is, of course, wise to wait for a short time in case of severe shock. An experienced surgeon once said that if shock does not disappear in two days, operate anyway, which gives the idea.

Signs and symptoms of liver injuries such as described by Dr. Thomson in his paper should point to but one type of treatment, and that is surgical. I do not believe that the opening and closing of an abdomen, when you suspect injuries to the liver, with much hemorrhage, is bad treatment, even if you do not find the liver badly torn. Of course, the usual thing in this is to make an early diagnosis of liver injury and operate early.

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MAY, 1936

**EDITORIALS**

**THE HEART AS A SURGICAL  
ORGAN**

No part of the human body is immune from surgical investigation. Brain and nerve operations are commonplace. Chest surgery is rapidly developing standardized techniques. Surgery of the heart and the pericardium is getting beyond the experimental stage and is producing practical results in the human being by operations for the repair of traumatic wounds, the relief of angina pectoris and the relief of acute or chronic cardiac compression by removing intrapericardial fluid and cutting constricting scar tissue. Surgery of valvular lesions must still be considered experimental.

From early times the heart as a sacred organ was taboo. The fact that opening the chest cavity was incompatible with life and the difficulty in working with such an actively moving organ delayed investigation. The modern approach to a surgical subject has overcome these difficulties by a thorough study and understanding of the anatomy, physiology and pathology of the heart, the pericardium and the pleura. Technical methods have been developed to inflate intermittently the lungs with the chest open; an understanding of the anatomy has been acquired so that the pleura need not be opened in approaching the heart; and an accurate understanding of the collateral circulation of the heart has been made possible by Prussian-blue injection studies. Outstanding leaders in these recent investigations and in the development of practical operations have been Dr. Claude S. Beck of Cleveland and Dr. Elliott C. Cutler of Boston and their associates.

The first deliberate attempt to suture a wound of the heart was made by a Scandinavian in 1895. A Negro surgeon, Dr. D. H. Williams, of Chicago, repaired a wound of the pericardium in 1893. Repair of stab wounds of the heart is now a standard procedure. A suture in the apex of the heart for traction and stabilization is an important preliminary step.

For many years operations have been done to relieve the pain of angina pectoris by thyroidectomy and by cutting the sympathetic nerve supply carrying the pain fibers to the heart. This of course gives symptomatic relief, but does not contribute a great deal to the relief of the underlying cause. Beck has shown experimentally that the coronary arteries may be completely occluded if the heart has been allowed time to develop a proper collateral circulation. It is found in old people that coronary arteries may sometimes become nearly or even completely occluded and a collateral circulation take good care of the heart muscle. This accounts for the sometimes lesser severity of attacks of acute coronary occlusion in old people as compared with young people. Dr. Beck has given a new blood supply to the heart of seven human beings up to November, 1935, by grafting pedicles of pectoral muscle over the surface of the heart. The pectoral fascia is closed. Movements of the heart are not interfered with and symptomatic relief has been obtained. Bedridden patients have gone back to work.

During the last few years many operations of pericardectomy or decortication (Delorme) of the heart have been reported for the relief of chronic constrictive pericarditis or the clinical syndrome known as Pick's disease. This is characterized by an "inflow stasis" due to cardiac compression resulting in a small quiet heart and later high venous blood pressure and ascites. The fluoroscope is valuable in the diagnosis. At operation the heart is completely dissected out of its constricting shell of scar tissue. The moving pictures by which Dr. Beck demonstrates this operation are vivid and thrilling to say the least. He has been able to put many bedridden people suffering from this disease back to activity. Dr. E. D. Churchill of Massachusetts General Hospital has operated upon twelve such cases with good results in nine. Dr. R. A. Griswold<sup>1</sup> of Louisville describes the successful treatment of a seventeen-year-old boy suffering from Pick's disease.

Surely here is surgery that challenges the skill of the true surgeon—that surgeon described as having the eye of the eagle, the heart of the lion, but whose hands possess the gentleness of a woman's caress.

<sup>1</sup> Griswold, R. A.: Chronic Cardiac Compression Due to Constricting Pericarditis. *J. A. M. A.* 106:13;1054 (March 28), 1936. A good bibliography is included.

## THE NEW BUREAU OF MATERNAL AND CHILD HEALTH

With the passage of the Social Security Act at the recent special session of the State Legislature, a way was made open for the use of Federal funds in the interest of the health of mothers and children. In accepting these funds, the Board of Health has been in frequent contact with the officers of the Indiana State Medical Association in order that their counsel might be secured, and also in order that the principles underlying ethical medical practice might be maintained.

The Children's Bureau at Washington, under whose direction the funds are to be expended, gives assurance that it has no wish to encroach in any way upon the prerogatives of the medical profession. Those in charge have made it clear that they wish to utilize only such physicians and other workers as may be expected to understand and sympathize with the objectives of the practitioners established in a given community. The first step in organization was the appointment of Howard B. Mettel, M.D., of Indianapolis, to the position of Director of the Bureau. Doctor Mettel has been in the practice of pediatrics as a specialty for several years in Indianapolis. He is at present secretary of the Marion County Medical Society, and will continue in that capacity. Doctor Mettel is thoroughly acquainted with the ethics of private practice and also with the objectives of organized medicine. He may be expected to keep the interests of the profession foremost.

Working under Doctor Mettel<sup>1</sup> will be a number of other persons giving part or whole time to the work. Under this plan the State Board of Health will be in position to send to medical societies speakers who are capable of giving a high quality of instruction, particularly in pediatrics and obstetrics, but also in other branches relative to the health of the mothers and children.

Educational programs of various sorts will be given under the sponsorship of the local medical profession. It is hoped that a plan can be reached whereby the assistance of the State Board of Education can be obtained so that the opportunity will be given to help organize health education in the schools. This is most important because the subject matter and the ideals taught the children of today will tremendously help or hinder the medical profession in the years to come. The key word of the entire program is to be health education along rational lines. Provision is made both for professional instruction and for the teaching of the public in matters pertaining to health. Clinical work of any sort is to be kept to a minimum, and then only in the form of demonstrations under the control of the local medical profession. The profession is assured that both in Washington and Indianapolis those in charge have ideals in accord with those of the organized medical profession.

## MOTHER'S DAY

The medical profession has regularly contributed toward the celebrations of Mother's Day which this year falls on Sunday, May tenth. Their contributions have consisted of advice to the public concerning methods of reducing the risks of motherhood. The good results from this work must be apparent to every physician who practices obstetrics, and undoubtedly it has been a factor in creating the improving puerperal mortality rate of our state for 1935, the lowest Indiana has ever secured—4.9 per thousand deliveries.

The Committee on Puerperal Mortality of the Indiana State Medical Association urges the physicians of our state to assume this duty once more, and to avail themselves of the opportunity to acquaint the public with the facts which medical science provides. It is only through the medical profession that the public can be properly educated in this matter.

Every county medical society has been provided with material for appropriate Mother's Day programs. The Committee earnestly requests that every county medical society cooperate to the end that puerperal mortality may be still further reduced; the consequent promotion of prestige and honor for organized medicine is inevitable. Make the most of this opportunity!

## "— AND SUDDEN DEATH"

This was the title of a magazine article printed some time ago, an article that portrayed in a most striking and fearsome manner the havoc being wrought throughout the country by that modern juggernaut, the automobile. The article was widely copied and thus was accorded an unusually wide distribution. The lay press editorialized on the subject, and in the home and on the street it was commonly discussed. However, Mr. John Public is becoming somewhat blasé in such matters. A gruesome automobile disaster occurs in a community, brings forth much comment, and in a few days it is forgotten. The public is aroused only when someone of prominence meets death in one of these usually preventable collisions.

On one of our principal thoroughfares recently there was a collision between a passenger car and a large commercial truck. Three other cars unavoidably smashed into the debris with resulting death to one and serious injuries to many others. Much comment was heard about town, chiefly to the point that regulation of commercial trucks on our public highways was in order. A day or two later the local highschool basketball coach, an exceedingly popular young man, was instantly killed when his car collided with a commercial truck on one of our popular highways. Seldom have we known the local public to be so thoroughly aroused. An outstanding young man had been taken from

<sup>1</sup> See Dr. Mettel's article on Page 245 this issue.

us, a young man who was the intimate friend and pal to some 2,400 youngsters in high school, a clean-living chap whose daily life was an example worthy of emulation by any growing high school student. He was known to be a careful, non-speeding driver, and he was traveling along a new two-lane highway when he met his death. Just how it happened is unknown other than that his car collided with a large commercial truck which was driven by a young man.

This commercial freight truck problem is not a new one. Our state legislature has coped with it for many years. Our federal government finally has come to consider it a problem which demands congressional attention. Our citizens are demanding that some remedial measures be instituted.

Let us consider the economic phase of the hauling of freight via the commercial truck. We contend that the truck does not "pay its way." True it is that the operator takes out a state motor vehicle license and it is presumed that his equipment is properly taxed, in some state or other. But we believe that even this does not "pay the way." A fleet of trucks, licensed though they are, does infinite damage to our highways, probably far more than is compensated by their license fees. They are in open competition with our "common carriers," the railroads, which pay enormous taxes in most Indiana counties. For example, if Lake County were suddenly deprived of tax income from the railroads, personal and property taxes would immediately increase to an intolerable point. Yet we go on and on, building more and more highways, many of which are monopolized by the commercial trucks. Only recently, in our home city and in a distance of some four miles, we passed exactly twenty-one trucks, and this was on a highway less than two years old. Some of the trucks were on the proper side of the four-lane street, some were straddling the center line, a few were weaving in and out of line, much to the discomfort of our driver.

We have studied this problem from many angles and have come to what we believe is at least a partial solution to an ever-growing menace, the freight truck traffic. In arriving at this solution, we have considered the northwestern section of Indiana where such traffic probably is greater than in any other section of the state. Chicago truck traffic to and from the east must pass through Lake County. We are generously supplied with modern highways, both east and south, there being four main highways in each direction. Our solution, then, is to restrict *all* commercial vehicles to one designated route, leaving the other three for more comfortable, safer travel on the part of drivers of pleasure cars. We have not made a complete survey of Indiana, but we believe that other sections of the state are sufficiently well supplied with motor highways so that these restrictions could be carried out as well as in north-

ern Indiana. Residents on the "truck" highways will object, saying that they are discriminated against, but a study of the road map and personal observations in traveling over Indiana highways justify the opinion that John Brown, even though he lives on a "commercial" highway, will find it necessary to travel only a mile or two in either direction to find a cross highway leading to a restricted route.

Engineering is not our specialty. Our sole claim to ability to solve this perplexing problem lies in long years of observation and study of automotive traffic and a reasonable amount of common sense. We study each of the reports of the National Safety Council, we consult traffic officers on every possible occasion, we carefully analyze traffic casualties; thus we arrive at the presented solution.

## THE LAST CALL!

On Tuesday, May fifth, just four days after you receive this copy of THE JOURNAL, Indiana voters will register their choice of candidates for the fall election. Never before in our memory has there been such a need for active, intelligent action on the part of the medical profession as at the present. Issues are more clearly cut than ever before. The recent special session of the legislature demonstrated most effectively that the medical profession of this state has its work cut out. The pattern resembles that of former years, but it has a number of new quirks and designs; groups that heretofore attended strictly to their own knitting seem to have acquired the notion that they should mix in matters usually considered as being chiefly in the domain of medicine. Right now we want to urge this thing upon you: If you have not already done so, *please* turn to pages 196 and 197 of THE JOURNAL for April, and read every word of those two reports.

First, read the admirably prepared report on "The Public Health Bill" by Verne K. Harvey. This will give you a very clear idea of what it is all about, and what we may expect from this bit of legislation. Then read the next page, where you will find a detailed report of our Committee on Legislation and Public Policy, one of the most dynamic reports we have had the pleasure of reading in many years. Members of the Indiana State Medical Association, this committee *worked* on this particular job; they rendered yeoman's service, not only to our profession, but to the populace of the State of Indiana, and it will be a long time ere we have given them proper credit. Those who were on the floor of the Senate, last March, when forces such as have never before been expected to enter a fight of this sort were right out in the open, witnessed a spectacle seldom seen in the Indiana legislature. The Committee's

report indicates (facts are, it names names) that a member of the Alcoholic Beverages Division was intensely interested and that Senator Weiss, who seems to have been the bell-wether of the group fighting the medical profession, busied himself by several hasty conferences with this man, according to the quoted story from the Indianapolis *News*. Just what connection there may be between the Alcoholic Beverages Division and Section 129½ of the Welfare Bill may be a mystery to most physicians, but we have a very decided notion that the tie-up was purely a bit of political intrigue, and the story may be told at another time.

On page 198 of THE JOURNAL, there appears a copy of the official roll call. It shows in plain, unmistakable language just what may be expected from these members of the Senate at another time. Bear this in mind: Some of these gentlemen are holdovers—that is, they were elected in 1934 for a four-year term; hence, they automatically take their seats in January of next year. It will be just as well for them to know what we think of their attitude, and that their doings will be very carefully observed at the next session. It is probable that a few of those named are not candidates for re-election. We know that many of them are. This information has been placed in the hands of your local legislative committee. If you do not have the information, it is available to you, you should have it, and you should act accordingly.

This is no time to play partisan politics; it is no time to mince matters. The issue is squarely set. Your legislative candidates are on record as being either for or against the principles of decency in the profession of medicine. Even though one or more of the recalcitrants is a friend or even a special crony of yours, regard him as a political opponent and vote and work against him. Only four days remain, but we have seen elections rise and fall in less time than that!

On the other side of the picture are those who valiantly fought with us and helped us to win. They deserve our most active and intelligent support. See that it is properly rendered unto them. If you are already active in this thing, keep going until the polls close; if you have been inactive, for the love of your profession, get going, and go at full speed. We can clean out this nest, and we can pretty well rid the 1937 legislature of those who have shown themselves to be enemies of the better health interests of the people of Indiana. All that is required is to do the thing that needs to be done.

In conclusion, and on behalf of the membership of one of the greatest and liveliest of all state medical associations, we extend to the members of this Committee our heartfelt thanks. As someone once said, "You've done noble!"

## EDITORIAL NOTES

It is to be hoped that the incoming A. M. A. administration will make some few changes in the annual appointments, particularly the heads of one or two of the larger committees. In one instance, at least, a change would be quite welcome for one committee chairman, by word and deed, seems wholly convinced that the socialization of medical practice is a thing very much to be desired; we would feel much better about it if he were forgotten when committee assignments are made.

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When you are returning from Kansas City, and while you are mulling over the good things resulting from the trip, begin planning your little trip to South Bend in October. The Indiana State Medical Association has some fine meetings to its credit, but from a preview of the plans in the making, we would say that the St. Joseph County society means to put it over all previous efforts. The same general program will be followed—one day given over to golf and trap shooting, House of Delegates meetings, and a stag smoker; then two days of get-down-to-real-business, which means two days of intensive scientific study. As usual, the ladies will come in for their full share, so ask the Missus to arrange her calendar accordingly. It is by no means too early to make hotel reservations. We have had ours for some two months!

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We recommend a close perusal of the reports of officials and department heads of the American Medical Association as published in *The Journal of the American Medical Association* on April 4th, especially the reports of the secretary, Dr. Olin West, and the Board of Trustees. Dr. West, as usual, is brief in his resume of the work of his office during the past year, yet he gives a cross section that indicates very clearly the enormous mass of material that passes over his desk. The Board of Trustees, one of the busiest of the official groups in the American Medical Association, has prepared a rather voluminous report, but it is well worth the reading. We have every reason to be proud of the present group composing this Board; geographically, it covers the country very well and each member is thoroughly alive to the present state of medical practice.

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You will want to read the Outline of Indiana's Program for the Bureau of Maternal and Child Health on Page 245, and the programs for District Meetings on Page 253.

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May is the time of district meetings in Indiana. A majority of the districts already have arranged such meetings, and that is a decidedly good indi-

cation of the present medical trends. The county medical society is the backbone of medicine; it is the one organization that must continue to function if organized medicine is to progress. However, the district society is a very much worthwhile unit; it does things to stimulate us to better meetings and to better work; it provides new contacts, and the opportunity to renew acquaintanceship with folks whom we see but once or twice yearly. The customary dinner sessions of our district meetings liven the cockles of one's heart in a manner that can be accomplished in no other way. Consult the District Meeting Directory on page 253 in this issue of THE JOURNAL and make your plans to be in attendance.

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The American Medical Association House of Delegates seems to have their work cut out for them at the coming Kansas City session. With the usual "run of business," and a group of resolutions rather revolutionary in character, this promises to be a busy season. The California Medical Society has proposed a few resolutions that will bring forth much comment, particularly one relative to diagnosis by hospitals. We are quite in agreement with them on the subject. For the past several years the medical profession has opposed mass production in medicine, has countered every move to bring about a socialized state of the profession. Most of these endeavors have come from the outside, but now we find some of our hospitals offering this very thing. We have had frequent cause for complaint regarding some of the actions of the Galifornia group these past few years, but in this instance we commend them for their action.

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#### REGISTRATION OF NARCOTIC TAXPAYERS

Narcotic taxpayers include doctors, dentists, and druggists. During the latter part of May there will be mailed from the office of the Collector of Internal Revenue in Indianapolis Forms 678 and 713 for registration under the Harrison Narcotic Law, as amended, for the year beginning July 1, 1936. In order to avoid a delinquency charge, those forms must be executed and returned to the Collector's office on or before July 1, 1936. Inventory may be taken at any time after receipt of the forms, as provided by Art. 6, of Regulations 5, and the completed forms mailed at once with remittance of tax.

Remember that forms mailed on July 1 seldom arrive in the Collector's office before July 2 or 3, and are, therefore, regarded as delinquent. Delinquency involves penalties graduated on the basis of the number of times delinquency has occurred. If your blanks are not received in ample time, request them by writing to Mr. Will H. Smith, Collector of Internal Revenue, District of Indiana, Indianapolis, Indiana.

#### ARE YOU GOING TO THE A. M. A. MEETING IN KANSAS CITY?

If so, don't forget to have your railroad ticket agent give you a certificate which, when properly validated, will entitle you to purchase a return ticket over the same route traveled to Kansas City at one-third the fare paid to Kansas City. Train service is available from all parts of Indiana. Special trains will go from Chicago to Kansas City on the nights of May 10 and 11 for members of the American Medical Association, their families and friends. Fourteen-passenger skyliners will be in service to Kansas City, and this service may be obtained from Indianapolis. If you plan to drive your own motor car, be sure to secure the latest road information before you leave, and be sure to allow ample time to reach Kansas City without hurrying. No matter how you go, *don't forget to take your Fellowship card with you.*

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Postmaster General Farley announced some time ago that the present presidential campaign would be of the "dirty" variety and he was taken to task for the announcement. Now comes Samuel Blythe, in a recent article in the *Saturday Evening Post*, with a similar comment. Judging from some of the earlier skirmishes, we are of the opinion that both of these gentlemen are correct in their predictions. We've been voting for some forty years, and in that time have studied politics, both state and national. We long since concluded that 1936 would at least be "different." Most physicians are more or less active in political affairs, as they should be. We have little time for or patience with one who shows no interest in such affairs, just as we have little in common with the man or woman who boasts, "I never vote; what good does it do?" By all means get into the fight, no matter whether you are for or against the "New Dealers"; we have the notion that a red-blooded, slam-bang campaign is one of the things this country really needs!

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When you plan that summer vacation, and we hope that every one of our members already is thinking about it, you should allot two or three days to a little tour of the home state. If you live in the southern end of Indiana and never have visited the manufacturing centers in the northern part, by all means head your car to the north and see what is going on there. To many it will seem like getting into another remote section of the United States. To those of the northern section, especially those who have never seen Brown County and that territory to the south, we recommend such a trip. Roads were never in better condition; accommodations of all sorts are to be had at reasonable prices, and scenery such as you never believed

was to be found in Hoosierdom will unfold before you as you drive among the southern Indiana hills. Make your trip a leisurely one. Stop and chat with your fellow practitioners as you go along; you will get a better idea of Indiana medicine than you have ever had.

It is not too late to arrange to attend the Kansas City session of the American Medical Association the week of May eleventh. Preliminary program announcements indicate that the scientific program will be unusual, and advance notices of the commercial exhibits imply that practically everything new and worthwhile will be on display. Sometimes we wonder if physicians who attend the meetings of the American Medical Association and our own state meetings give enough time and attention to these exhibits. Special efforts to "do" the exhibits thoroughly will bring much pleasure and profit. The exhibitors, like the advertisers in the medical press, have much to do with making it possible to carry out the extensive programs which we have come to expect at such meetings. Spend a little time with the exhibitors whether you want to buy anything or not; the attendants like it; they want to become acquainted with you, and—take it from us—you will find it not only interesting but you are bound to learn something of value to yourself.

Folks who make more or less regular contributions toward the various organizations for improving horse flesh (referring, of course, to the "bookies") will be interested in a recent activity of the Federal Post Office Department in curbing the activities of an organization known as the Association for Legalizing Lotteries. It is to be presumed that this organization, noting the marked increase in the sale of Irish Hospital Sweepstake tickets in this country, devised the "one dollar lottery plan" just recently stopped by the Department. An amazing number of folks pay their two and one-half dollars for tickets on this race, all imbued with the notion that their ticket may call for a fabulous sum at the conclusion of the race. Gambling is inborn to most folks; taking chances occupies the attention of most of us, to some degree. We hear more and more frequently comment to the effect that the government should legalize mutual betting and lotteries. While we are expressing no opinion in the matter, it is our observation that the average doctor is not averse to "laying a bet on the line," in case a bookmaker is nearby.

The question of socialized medicine continues to be a topic of much interest to the profession and

to the laity, judging from the number of articles appearing in the press in general. Our medical journals proceed to offer evidence of every sort that is really convincing, but the sad fact remains that this is read chiefly by medical men. There is not so great a need to publicize the medical profession, but there is a very great need for putting our side of the picture before the public. We recommend that the educational committees of county medical societies arrange for programs on this subject whenever possible, having physicians who are well posted on the subject assigned to public meetings of various sorts. If your society does not have such a committee, now is the time to name one, for this is a very important part of our program. In some societies such activities have flourished and the results have been pleasing both to the profession and to the lay groups addressed. However, there is one thing that should be borne in mind in this connection, and that is that efforts should be made to have all requests for such addresses referred to the educational committee. Occasionally we find physicians who like this thing of talking before lay groups, and quite often we discover that they have said things which might well be left unsaid. By all means get an educational committee organized in your local society, but see to it that this committee is in entire control of the matter.

#### PHYSICIANS INVITED

##### "FIRST-HAND OBSERVATIONS OF STATE MEDICINE IN EUROPE"

Dr. George Wood Clapp, of New York City, will address the 79th Annual Session of the Indiana State Dental Association on May 18th, at 7:30 P. M., in the Assembly Room of the Claypool Hotel, Indianapolis, on the general subject of "Socialized Dental and Medical Service."

Last summer Dr. Clapp made a tour of the more important countries in Northern Europe where compulsory health insurance is in effect and while his efforts were largely directed toward the study of dental conditions, he made such observations of medical practice as opportunity offered.

Dr. Clapp will present evidence to show that socialized health service is destructive to professional standards in both medicine and dentistry; that a vast amount of the service rendered does not conform to even very reasonable American standards; that in some countries, it is turning a large part of the population into medicine drinkers; that the lower standard of medical practice has resulted in an increase rather than a decrease in the amount of sickness, and that the practices of medicine and dentistry in these countries are no longer financially attractive as vocations.

Dr. Clapp will present information as to what dentists are planning in New York City to help protect service according to good American standards.

Members of the Indiana State Medical Association are cordially invited to attend this session.

Edward L. Mitchell, President,  
Indiana State Dental Association.

Dr. Thomas H. Parran, Jr., health commissioner of the State of New York since 1930, was appointed surgeon general of the U. S. Public Health Service, March 27, to succeed Dr. Hugh S. Cumming, who has retired. In the April sixth issue of *Time* magazine, an article concerning Dr. Parran and his appointment was published, and stated that Dr. Parran definitely favors socialized medicine. Immediately the officers of the Indiana State Medical Association made inquiries of the A. M. A., and a telegram was sent directly to Dr. Parran. Officials of the American Medical Association expressed surprise at the statement concerning Dr. Parran's attitude, and a telegram from a trustee of the A. M. A., one who is well acquainted with Dr. Parran, stated: "Thomas Parran is four square with the medical profession." An editorial in the *New York Times* for March twenty-fifth quotes Dr. Parran as saying, "I am convinced that an integrated plan of public health, public medical service and private practice is preferable to health insurance," and Dr. Parran's own letter in response to the telegram from Association officers indicates that the statement in *Time* magazine concerning his attitude was premature and unfounded. Indiana physicians will be glad to know that the sixth surgeon general of the United States Public Health Service probably will ably succeed Dr. Cumming and uphold Dr. Cumming's friendly attitude toward the private medical practitioner.

to be a minister, physician, and what-not. If we could rid our communities of these quacks, there would be less occasion for a consideration of the question of the costs of medical care. We believe that the people of this country spend enough money to be assured of proper and competent medical and surgical care if it were directed in the proper channels.

A year or so ago when Albert G. Milbank, chairman of the board of the Milbank Foundation, visited Indiana as the guest speaker at the annual secretaries' conference, he had somewhat to say regarding the activities of the fund in the field of medicine. Several times we have commented upon his address, chiefly to the effect that his Hoosier contacts seem to have brought about a change of mind and heart. At the annual meeting of the board of the Milbank Foundation in New York on Friday, March twenty-seventh, Mr. Milbank addressed the members of the board, showing a decided trend toward medical opinion of the present time. In speaking of the recent federal activities in regard to public health, Mr. Milbank mentioned the "recognition on the part of the federal government that prevention of ill health is an essential measure whereby to advance the economic security of a large proportion of our population." Then he proceeded to list certain governmental activities in recent years as "*throwing a doubt upon certain postulates which we had come to take for granted.*" (Italics ours.) That portion of Mr. Milbank's address which was reported in the *New York Times* would seem to indicate that the gentleman had "seen the light," and that he had come to the conclusion, inescapable to a man of education who had made a study of our present problems, that the practical solution lies in a closer alliance with the medical profession. Others on the program included Drs. Russell Cecil of New York, Elliott P. Joslin of Boston, C. E. A. Winslow of the Yale Medical School, Livingston Farrand of Cornell University, and Alton Pope of the Massachusetts Health Department. Thus it may be seen that we were well represented and that the cause of medicine was well defended, all of which substantiates our contention that in order to put forward our program it is only necessary to make the proper explanations of our platform.

A bill has been introduced in the New York State legislature which provides for the limiting of medical advertising. The bill is, of course, chiefly directed toward the charlatans who seem to be as prevalent in New York as they are in most other states. The measure was introduced by Senator Feld, and seeks not only to forbid physicians to advertise for patronage, but also makes it unlawful for a physician to employ or cooperate with unlicensed practitioners. A somewhat similar measure introduced by Senator Feld met with defeat, but he brought forth another, seeking to eliminate some of the "objectionable" features, yet shoot straight to the point. Probably most of the objections came from the magazine and newspaper publishers since we have not yet reached that Utopian period when all publishers use the Golden Rule as a yardstick with which to measure advertising copy. We are particularly interested in that provision of the proposed law which provides penalties for those non-licensed and non-competent charlatans who, given a white coat, proceed to impress the gullible with their "superior" knowledge. Some years ago we aided in cleaning out a number of such sore spots in our county, and for a good many years we were free from such truck. Now, however, we have at least two such places, one of them harboring a foreign-born quack of the first water who claims

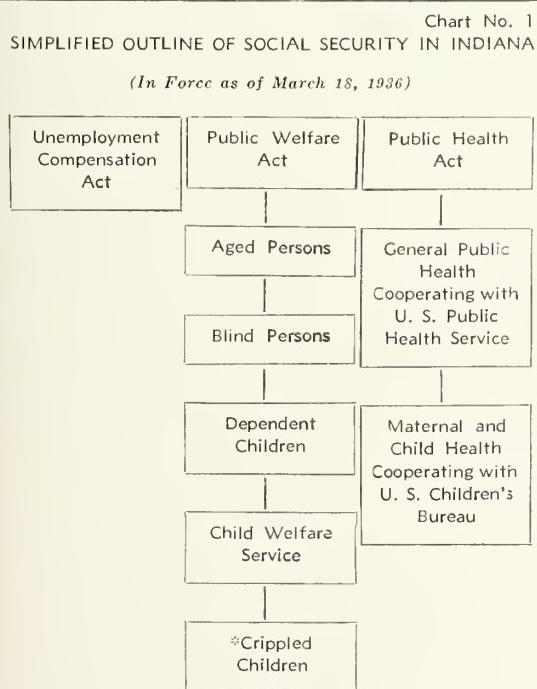
ATTEND YOUR OWN  
DISTRICT MEETING — AND  
ANY OTHERS THAT YOU CAN.  
READ THE PROGRAMS  
ON PAGE 253.

## OUTLINE OF INDIANA'S PROGRAM FOR BUREAU OF MATERNAL AND CHILD HEALTH\*

HOWARD B. METTEL, M.D.  
DIRECTOR OF BUREAU

In the April issue of *The Journal of the Indiana State Medical Association*, Volume 29, Number 4, appeared an article explaining Indiana's program in maternal and child health under the Social Security Act. This article, written by Albert McCown, M.D., Director of the Maternal and Child Health Division of the U. S. Children's Bureau, Washington, D. C., outlined the purposes of the Social Security Act (Title 5, Part 1), and its administration by the Children's Bureau in Washington. The purpose of the present article is to outline briefly the Indiana plan as submitted to the Children's Bureau of the Department of Labor at Washington on April 1, 1936.

On March 18, 1936, the Indiana State Legislature enacted laws applying to the National Security Act. In talking to many members of our profession, it is found that a great deal of confusion exists in the minds of our members as to the text and purposes of the three separate bills as passed by the Indiana State Legislature. A brief outline of these bills can be seen in Chart No. 1. It is



Prepared by VERNE K. HARVEY, M.D.,  
Director, Indiana Division of Public Health.

\* The Director of this Department to be appointed by State Welfare Board, but approved by Director of Division of Public Health, and State Board of Health.

noted that there are three distinct bills, namely: (1) The Unemployment Compensation Act, (2) Public Welfare Act, and (3) Public Health Act. It is also to be noted that the work of the Bureau of Maternal and Child Health has to deal with the Public Health Act only. Its functions, as will later be described, are purely educational and demonstrational. It has nothing whatsoever to do with the relief of crippled children, which includes medical services to all dependent children, not necessarily orthopedic cases alone, but to all disabled children as well as child welfare services and the care of dependent children. It is again called to the attention of the Indiana State Medical Association that the Bureau of Maternal and Child Health has nothing whatsoever to do with the administration of the Public Welfare Act. This comes under the jurisdiction of the State Public Welfare Board and the local county welfare board, the latter being appointed by the county judge. As noted in the lower square, labelled "Crippled Children," the director of the Crippled Children's Bureau is to be appointed by the State Welfare Board, but approved only by the director of the Indiana Division of Public Health and the State Board of Health.

The accompanying paragraphs, therefore, are to be limited to a discussion and outline of the Public Health Act and its proposed administration.

According to the Social Security Act, Title 5, Part 1, each state must submit and fulfill a plan containing the following seven requirements:

- I. Financial participation by the state.
- II. Administration of the plan or supervision of administration of the plan by the state health agency.
- III. Such methods of administration (other than those relating to selection, tenure of office, and compensation of personnel) as are necessary for the efficient operation of the plan.
- IV. Provision for reports by the state health agency to the Secretary of Labor.
- V. Provision for extension and improvement of local maternal and child-health services.
- VI. Provision for cooperation with medical, dental, nursing, and welfare groups.
- VII. Provision for development of demonstration services in needy areas and among groups in special need.

Several years ago a child and maternal health bureau was organized in Indiana under the pro-

\* Given before the Liaison Committee of the Indiana State Medical Association and Indiana University, April 1, 1936.

visions of the Sheppard-Towner Act. The bureau was under the supervision of a director, who was directly responsible to the State Health Commissioner. For certain reasons not pertinent to this present discussion, the bureau was very unpopular with the physicians. The doctors of the state in many places objected to the forms of demonstration held in their communities. Their complaints were not related to the benefit obtained by the demonstrations but to the manner in which the demonstrations were forced upon them.

With the reorganization of the State Board of Health in April, 1933, the Bureau of Child and Maternal Health was discontinued entirely, and a new plan was adopted. Dr. O. N. Torian was made chairman of the committee, working in co-operation with the Indiana State Medical Association, the Indiana University School of Medicine, and the State Board of Health. It was the purpose of this committee to coordinate the health work of the state as it pertains to mothers and children, and to bring about such harmony in health work as might be expected to serve them best. For each medical district of the state Dr. Torian appointed a physician who was expected to develop the work in his district. Clinics and other programs were conducted, but only under the direction of the local medical profession.

Much good was accomplished by this plan, but the time has come when there is need that the program be augmented. There now exists between the medical profession and the State Board of Health the finest feeling and cooperation. The medical profession seems willing to go ahead with the good work of the past few years and to take advantage of the additional funds made available under the Social Security Act, provided everything that is done is in accord with the ethics and policies of the medical profession. The profession feels that these problems are medical, and that they must, therefore, be under medical direction.

## I. FINANCIAL PARTICIPATION BY THE STATE

Figures have been submitted to Washington showing that during the year of 1935 the state of Indiana made expenditures of approximately \$75,000 in the field of maternal and child health. This figure is in excess of the \$63,259.49 allotted to Indiana for matching purposes. If our plans are approved and our budgets accepted in Washington, the State Division of Public Health will receive a check from the Federal Government for \$63,259.49, which will be an additional amount of money to augment services of Indiana's Bureau of Maternal and Child Health.

## II. STATE HEALTH AGENCY

According to the laws passed on March 18, 1936, by the Indiana State Legislature, provision was made for administration of the plan by the state health agency. (For details see copies of laws published under that date.)

## III. METHODS OF ADMINISTRATION

### 1. OLD ACTIVITIES

There was an educational program which consisted of sending out motion picture films and literature on maternal and child health throughout the state. Members of our own staff gave lectures, as also did members from the Indiana State Medical Association, to the county medical societies. Assistance was given to local nurses in maternal and child health problems by the nurses attached to the State Division of Public Health.

### 3. NEW ACTIVITIES PROPOSED

A detailed description of the new activities proposed is not given at this time; however, an outline of the organization can be seen in Chart No. 2. Briefly, it will be noted that the bureau is to be under the supervision of a director appointed by the director of the Indiana Division of Public Health. The program as outlined will be in co-operation with the Liaison Committee of the Indiana State Medical Association, the members being appointed by R. L. Sensenich, M.D., president of the Indiana State Medical Association, which committee is composed of the following doctors: Chairman, E. O. Asher, New Augusta; J. C. Carter, Indianapolis, and Stanley Clark, South Bend. Other supervisory members appointed from the Indiana University School of Medicine are: H. F. Beckman, M.D., Indianapolis; O. N. Torian, M.D., Indianapolis, and Matthew Winters, M.D., Indianapolis. The bureau and the director at all times are to work in accordance with the advice of this committee.

It is to be noted that the chief functions of the bureau are to be divided into: A. *Educational*; B. *Demonstrations*; C. *Field Work*.

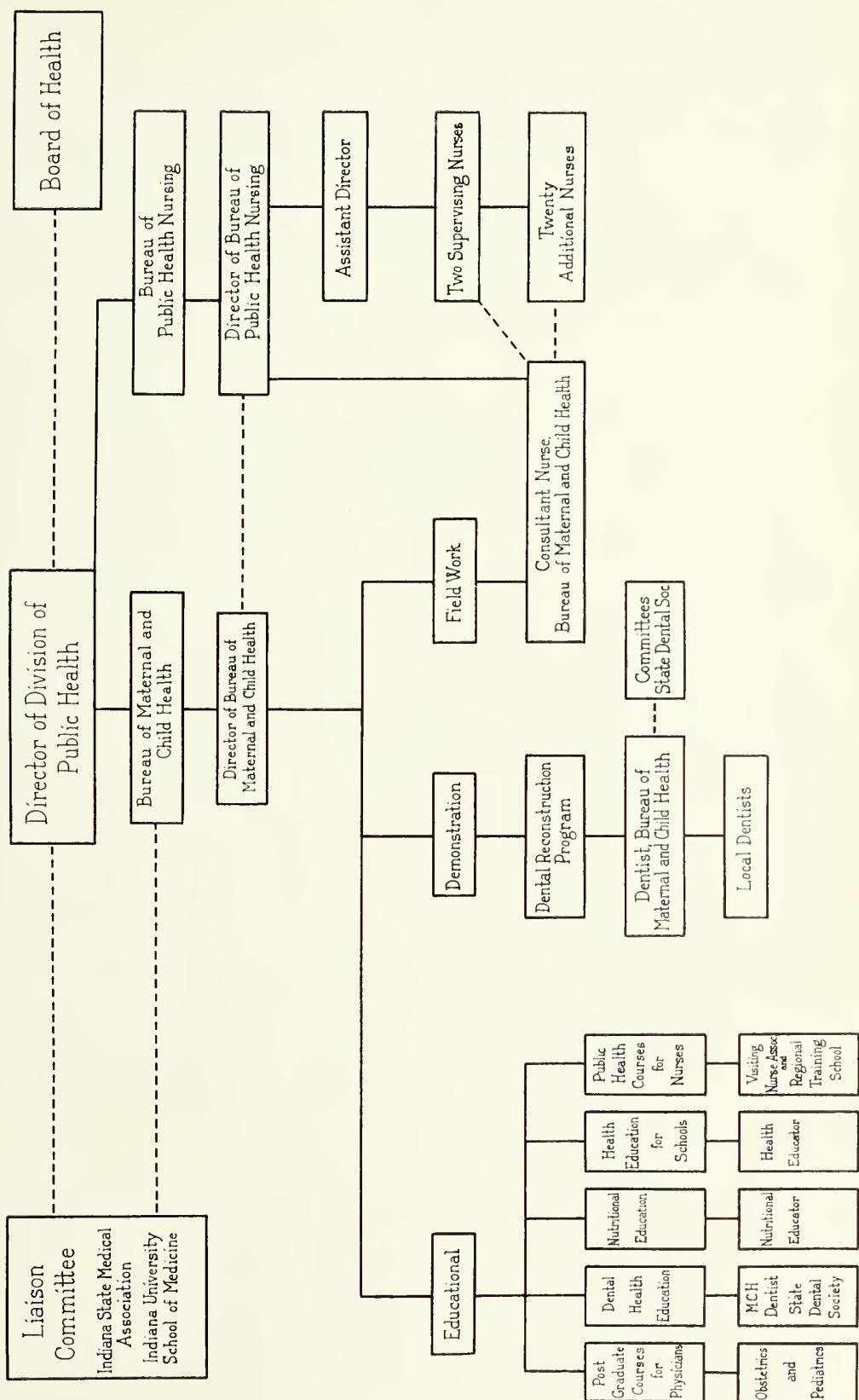
### A. Educational

#### a. Post-Graduate Courses in Obstetrics and Pediatrics for Physicians

It is planned to organize with each of the thirteen districts of the Indiana State Medical Association post-graduate courses wherever they are requested from the local groups or societies. Our state association is composed of thirteen councillor districts, each of which is made up of from three to five county medical societies. Councillors and secretaries of these districts are to be contacted and the scope of the work presented to them. After this contact, it is hoped that they in turn will disseminate this instruction to their local societies. Any program given in a medical district or county medical society will be conducted under the direction and at the request of their local program chairman or secretary. Speakers for this work will be supplied from members of the Indiana State Medical Association at large, or out-of-state organizations, depending upon the requests of the chairman of the local medical unit. Wherever possible, the speakers' subjects are to concern matters touching upon maternal and child health directly.

# ORGANIZATION CHART OF STATE BUREAU OF MATERNAL AND CHILD HEALTH

CHART NO. 2



In the near future the director of the bureau intends to send out requests for volunteer speakers and their subjects. These will be filed so that requests for speakers may be responded to promptly. Provision has been made to pay for the time and expenses of these speakers while attending such local meetings.

#### d. Dental Health Education

Dental health education conducted by a dentist under the supervision of the state director, who in turn will receive his suggestions and cooperation from the State Dental Association. Recommendations for the appointment and selection of this dentist are to come from the State Dental Association.

#### c. Nutritional Work

A nutritionist is to be full-time and is to spend a great portion of time in educational work, partly in the schools and in connection with the State Department of Public Instruction. This worker is also to take active interest in material which will appear in textbooks for the state, seeing that proper nutritional facts are outlined in the children's textbooks. Later on, but not at present, this worker may be called upon to do some demonstrational work, but at the present time this will be confined to local medical societies only.

#### d. Health Education for Schools

We plan the appointment of a health educator, to work in cooperation with the State Department of Public Instruction. In fact it has been arranged that his offices be located in the State Department of Public Instruction. We have in mind a highly trained man for this position, a physician who has already had a vast amount of experience along these lines. It shall be the educator's duty to cooperate with the State Department of Education in arranging and supervising talks to state colleges, normal schools, and high schools during the coming summer months. It is the purpose of the educator to acquaint these students, who are later to become teachers, with the proper facts in regard to child health and maternal welfare. This same idea can be later included in the curriculum of the high schools and the grade schools throughout the state, under the supervision of the departmental head. Other proposed activities would be the supervision of any material concerning child and maternal health that in the future will be written into school textbooks. This department could also cooperate with such state organizations as the Parent-Teacher Associations, and other similar groups. It is felt that the activities of this department will reach wide into the fields of education; however, at first the work would be limited to dissemination of proper health knowledge to the teachers.

#### e. Short Courses for Public Health Nurses to Be Arranged for Twenty Nurses

(For details, see paragraph "a" under "Field Services.")

#### B. Demonstration

(See Paragraph VII entitled "Demonstration Services.")

#### C. Field Services

It is proposed under our new activities:

a. To add approximately twenty generalized public health nurses in unorganized counties, the county paying for part of the costs.

b. To add two general supervising nurses to the State Bureau of Public Health Nursing.

c. To add one nursing consultant in maternity and child health, to be responsible for the conduct of the nursing program in this particular subject.

There are 61 counties in Indiana which have no public health nurses working in the rural areas. There are 46 counties which haven't a single public health nurse working within their borders.

According to the population in Indiana as of July, 1935, there were in the state a total of 392 public health nurses, as compared with the figure of 555 as proposed by the Commonwealth Fund of New York in 1934. It is to be noted that the ratio of public health nurses as regards the general population was 1:8,009; that the ratio of public health nurses to urban population was 1:4,611; and that the striking figure of the ratio of public health nurses to rural population in Indiana was 1:53,526. In other words, our field educational program is started for the purpose of educating the people of the state to the great need for more trained public health nurses in the rural districts, in order to bring the figure somewhere near that cited by the Commonwealth Fund of New York in 1934, of one nurse to the rural population of 13,804.

#### PLAN FOR PUBLIC HEALTH NURSES IN RURAL AREAS

To put twenty additional public health nurses in twenty counties, and perhaps a few in smaller city health departments. Some of the county funds now financing nurses are running low and the unofficial health agencies are finding it difficult to keep up the budget. We want to start modestly at first in order to insure quality work and quality supervision. Several counties which do not have nurses are watching for a chance under the Social Security Act to get a public health nurse by matching funds. Others will take action if they know that they can obtain State and Federal help for a nursing service.

#### Program of Work

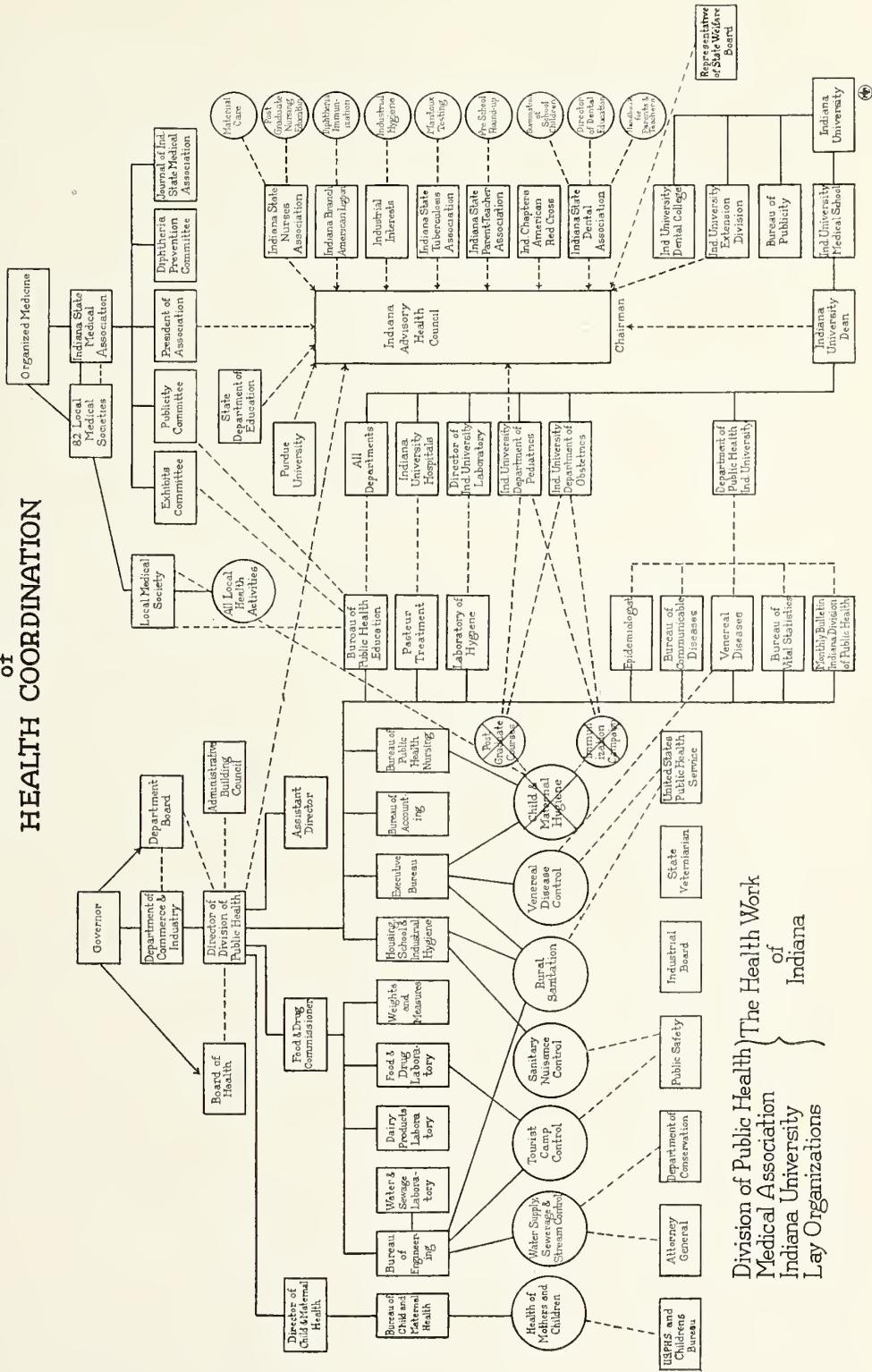
Special emphasis in rural public health nursing programs would be on prenatal, maternal, infant, and preschool welfare, and some school nursing with the children of the second and third grades. The details of their work would follow the objectives outlined by the National Organization for Public Health nursing as follows:

#### Maternity Service

To get in touch with all prospective mothers as early in pregnancy as possible; to see that they are provided with both medical and nursing supervision throughout the maternity cycle; to instruct mother and father in maternal hygiene and

THE INDIANA PLAN  
of  
HEALTH COORDINATION

**CHART NO. 3**



infant care; to instruct in the preparation for delivery; to arrange or provide nursing assistance during the delivery with the cooperation of the doctor; to provide or supervise adequate nursing care to mother and to newborn baby; to secure physical examination of newborn baby; to secure medical examination by the local or family physician for the mother before and after delivery.

#### **Infancy**

To assist in securing medical supervision including a physical examination for every child; to assist in getting complete birth registration; to instruct the mother in the importance of proper feeding with emphasis on breast feeding for infants; to instruct the mother in the hygiene and daily regime of the child; to assist in communicable disease control by the recognition of early symptoms; to assist in communicable disease control by securing immunization; to assist in securing the correction of defects; to provide or supervise adequate nursing care for all sick infants; to instruct the mother to place the infant under the care of her family physician.

#### **Preschool**

To assist in securing medical supervision including a physical examination for every child; to instruct the mother in hygiene and daily regime of the child; to assist in communicable disease control by the recognition of early symptoms; to assist in securing the correction of defects; to assist in communicable disease control by securing immunization; to provide or supervise adequate nursing care for all sick children.

#### **School Age**

To assist in communicable disease control by the recognition of early symptoms and by securing immunization; to assist the local physician in medical inspection and in the routine periodic physical examination of every school child; to assist in securing the correction of defects and in promoting health; to assist in securing special examinations and such follow-up as is necessary; to participate in the promotion of hygiene and sanitation of the school plant; to assist in securing proper instruction of pupils and parents in the principles of healthful living; to provide or supervise nursing care to all sick children.

There would be emphasis on parent education with adults, in groups and with them individually in home visits. This would involve prenatal, infant, maternity and child care demonstrations in the homes. In summer, work with 4-H Club girls and boys could be developed—a field slightly touched in Indiana. Nurses would assist physicians with delivery service in selected areas, and give demonstrations in preparation for delivery.

Throughout the whole program, nurses would work closely with the individual practicing physicians in each community.

#### **IV. REPORTS TO SECRETARY OF LABOR**

The State Division of Public Health will make such reports, in such form and containing such information, as the Secretary of Labor may from time to time find necessary to assure the correctness and verification of such reports.

#### **V. EXTENSION AND IMPROVEMENT OF LOCAL MATERNAL AND CHILD-HEALTH SERVICES**

This is provided for by the addition of twenty public health nurses.

#### **VI. COOPERATION WITH MEDICAL, NURSING, AND WELFARE GROUPS**

(See Chart No. 3.)

In 1933 the Indiana Advisory Health Council was

organized and has functioned since then, meeting irregularly. We propose to use this council as an advisory body for the maternal and child health program, adding to the members a representative of the Children's Division of the newly-organized State Welfare Department, as soon as the personnel of this department has been announced.

At the present time this council consists of the following:

Indiana University School of Medicine, W. D. Gatch, M.D., chairman.

President of State Medical Association, R. L. Sensenich, M.D.

State Department of Education, F. L. McMurray. Indiana University Pediatrics Department, O. N. Torian, M.D.

Purdue University, Dr. Stanley Coulter.

Indiana University Extension Division, Mr. Cavanaugh.

Indiana Dental Association, Edward Mitchell, D.D.S.

Indiana Red Cross, William Fortune.

Indiana State Parent-Teacher Association, Mrs. Logan R. Hughes.

Indiana State Tuberculosis Association, Murray Auerbach.

Indiana American Legion, Donald Stivers.

Indiana Industrial Interests, Peter C. Reilly.

Indiana State Nursing Association, Nellie Brown.

#### **VII. DEMONSTRATION SERVICES**

After careful consideration and after conferences with committees from the State Dental Association, it has been decided to make the first demonstrational service under the lines of general dental inspection, repair and restoration. This program has been readily accepted by committees of the State Dental Association who are very anxious to participate in this program.

One of the outstanding health defects throughout the state of Indiana most noticeable to all those doing children's work is the marked lack of facilities for proper dental care. This is especially true in rural areas, many counties of which have no dentist available. Even in our urban areas where some work is being done among indigent children, the amount of work accomplished by these few agencies in no way serves to meet the problem. In such cities as Indianapolis where the local city board of health is able to offer some assistance in dental care for indigent children, the demands upon these workers are too great to make any noticeable improvement on the general care of these needy children.

With this first reason in mind, a conference was held with a committee from the State Dental Association, composed of the president of the association, the chairman of their relief committee, and the dean of the Indiana University School of Dentistry. This committee agreed upon the following plan:

A dentist is to be appointed whose duty it shall be to work in close cooperation with the State

Dental Association, which in turn will foster our plan to their local county dental societies. Already plans have been made for action upon this matter by their trustees, who are to meet in Indianapolis during the month of May at the time of the annual convention of the State Dental Association. The Bureau of Maternal and Child Health in cooperation with the State Dental Association would select a definite county or area where this work was most needed and the most cooperation could be received from its local or surrounding dental societies. The dentist, together with the director of the Bureau of Maternal and Child Health, would first lay plans with the local men in the selected area, explaining our project and asking them to assist in this demonstration. Only those cases would be selected for examination by the bureau dentist which were recommended by the local county dental society. In other words, there would be no infringement upon the private practice of these local dentists.

After the inspection, examinations, and recommendations were completed, our own dentist would set up either in a local school building or as a part of the local dental offices with the consent of the dental society, and begin work upon these children. He could also solicit the cooperation and assistance of these local dentists in caring for the general dental repair, or in cases where special needs were demanded such as orthodontia, additional help could be obtained from volunteer members from their locality or supplied by the Indiana University Dental School.

Should this plan be successful, it could be enlarged upon to include education in prophylaxis and other forms of dental hygiene. The immediate need now in Indiana is to have some adequate care of these neglected children in many areas throughout the state. Our plans would be probably the selection of some rural community rather than any urban demonstration. The selection of the dentist would be approved by the Bureau of Maternal and Child Health, but recommendations would be received from the State Dental Association. Duties of this dentist would be along the lines of dental education, as already being demonstrated through the workings of a sub-committee from the Indiana State Dental Association.

The Liaison Committee felt that Indiana's records as far as child health in Indiana in regard to contagious diseases such as diphtheria, scarlet fever, etc., are for the present adequate and compare favorably with the records of other states. Our infant mortality rate is not considered high. Therefore, our next thought in the way of demonstration will be along the lines of prenatal care. Here again we have some definite ideas in mind, but do not care to start them as a demonstration plan at this time, for the reasons above stated. It is the intention of the bureau to enlist the services of an obstetrician. This man will be selected on the merits of his ability to put this plan over with the phy-

sicians of the state before such a plan is submitted to the Children's Bureau and made ready for action.

It is the belief of the director of the Indiana Division of Public Health and the director of the Bureau of Maternal and Child Health that other demonstration services at this time are not needed. It is felt that we had too much demonstration under the old Division of Child Hygiene, and that such demonstrations are not only not needed at this time, but are probably not desired by the doctors as a state medical association. The members of the profession are to be assured that no part of this proposed plan is at any time to enter into anything resembling medical practice. It is again emphasized that the chief aim of this bureau is to promote education and field work in rural districts and areas of severe economic distress. Except where especially requested, most of the work will be confined to rural districts. In the more heavily populated areas where city boards of health and other organizations are in action, our services will not be needed at this time. However, any requests from these cities will be carefully considered.

#### CONCLUSION

The outstanding health needs of the state of Indiana at present are:

First: To place an adequate number of nurses in the field to assist in the general public health of the state population.

Second: That these nurses, inasmuch as a great part of their time is to be devoted to child and maternal health, be adequately trained in administering those maternal and child health problems.

Third: A general agreement among the members of the State Dental Association, the Liaison Committee of the State Medical Association, and the director of the Bureau of Maternal and Child Health, is that the dental care of children throughout the entire population of the State of Indiana has been woefully neglected, and that some demonstration now would be timeworthy.

Fourth: It is to be recognized that health needs and health facilities vary in the different sections of the state, and the bureau realizes that no single plan will meet all of these needs. The bureau will welcome suggestions from individual localities.

This program then is one of health education, depending for its success upon the understanding and cooperation of all groups interested in the health and the welfare of mothers and children.

Its scope is to include all doctors of the State Medical Association, and it is hoped that we will have your cooperation. It is the wish of the director of the bureau that each physician will view this plan of the state health department with an open mind, and formulate ideas which from time to time can be utilized in carrying out the work of this bureau. It is the hope of the members of the bureau that with this cooperation our Indiana plan will be the most successful of any state operating under the Social Security Act.

## PRESIDENT'S PAGE

### GRADUATE EDUCATION—NOTES

The Graduate Study Meeting of the Indiana State Medical Association for 1936 is now medical history. The House of Delegates authorized this study session as an experiment in graduate education, and the Council appropriated the necessary funds. The meeting was a very successful one and provided an excellent program of group clinics at the University and general meetings at the Claypool. Future plans should be based upon this experiment.

**ATTENDANCE:** The official registration, not including all who attended, was 653; 426 graduate physicians, 227 student guests. Of the physicians in attendance, 251 came from widely separated medical communities throughout the entire state. Despite bad weather conditions and the short notice of meeting the attendance was remarkable.

**NAME:** The name "Graduate Study Meeting" would seem to be descriptive of this type of assembly in which the time is devoted to the more detailed study of a limited number of subjects or specific diseases instead of the more common type of program. This name would avoid confusion with the annual business and scientific meeting of the State Association.

**PLACE OF MEETING:** The Graduate Study Meeting should be held in Indianapolis as the most central point in which adequate accommodations can be obtained. The attendance at this meeting demonstrated that consideration must be given to secure a room of sufficient size and desirable arrangement in order that the speaker may be heard and demonstrations be visible to the audience. The University has no amphitheatre of sufficient size, and the room used at the Claypool Hotel presents difficulties in seating arrangement. While future attendance cannot be definitely predicted, there is much reason to believe that the basic idea of this meeting may be developed to the magnitude of the outstanding meeting of the Middle West in importance and attendance. A Graduate Study program of national recognition would attract the Profession from neighboring states in addition to our own and would tend as well to stimulate interest in the already notable annual meeting of the Association.

**FINANCES:** It was originally suggested that this session be financed on the basis of a minimal registration fee. When the project was adopted by the House of Delegates and two days were designated in the week devoted to post-graduate clinics at the University, the plan of a registration fee was dropped in order to conform to the practice of the University in not charging a fee for their portion of the post-graduate week. Although the recent session was financed by the Council on an experimental basis, it would seem unwise to com-

pletely finance future meetings from association funds, especially in view of the probable increase in size and expense. It was indicated that it could be financed by the sale of space for advertising booths. This plan was discussed in connection with the recent meeting, but was abandoned by reason of its apparent impracticability as the University does not lease advertising booths during its course. Either registration fee or advertising plan might be used.

**DAY AND DATE:** Wednesday and Thursday, days on which the greater number of physicians plan to be absent from their offices, are undoubtedly the best days for the study session. As these days taken from the midst of the Post-Graduate week at the University must be more or less disturbing to the course generally offered immediately preceding graduation as a review and post-graduate program, the selection of another date has been suggested. In this the University could cooperate by presenting special clinics without disturbing its regular program.

**PROGRAM:** The Graduate Study plan should concentrate upon a few subjects, to be presented in a most practical manner. The program should be prepared by the Committee on Graduate Education, as part of a pattern of state-wide graduate education to be offered as a substitute for some "hit or miss" medical programs. The interchange of speakers from county societies could provide programs covering related subjects to any county society wishing to participate in this state-wide curriculum for a part of its medical programs. Properly handled from a financial basis, it is not impossible that the annual study meeting might provide a sufficient surplus of funds to finance a traveling demonstration into remote parts of the state, if desirable. The new activities by the government, in public health studies and many other projects directed to the care of the sick, make it imperative that the profession shall be fully informed of any advances in medical knowledge.

**RESPONSIBILITY:** The medical profession has repeatedly stated that it is the only group qualified to judge of the quality and adequacy of medical treatment. It must, accordingly, be admitted that the responsibility for the maintenance of proper standards of medical service falls upon organized medicine. Medical work of poor quality and evidence of failure to maintain contact with advances of medical progress reflect unfavorably upon the whole profession and invite the establishment of government medical service. Evidence of negligence or unjustifiable medical failure should be of as much importance to the medical group as is unethical conduct.

*R. L. Deneenick*

## DISTRICT MEETINGS

### FIRST DISTRICT

President W. E. Jenkinson, Mount Vernon  
 Secretary K. T. Meyer, Evansville  
 Councilor I. C. Barclay, Evansville  
*(Program not received)*

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### SECOND DISTRICT

President W. O. McKittrick, Washington  
 Secretary J. S. Brown, Carlisle  
 Councilor H. C. Wadsworth, Washington  
 Date and place of meeting: JUNE 16, at WASHINGTON.  
*(Program not received)*

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### THIRD DISTRICT

President George Dillinger, French Lick  
 Secretary C. E. Briscoe, New Albany  
 Councilor H. C. Ragsdale, Bedford  
 Date and place of meeting: MAY 20, at NEW ALBANY,  
 New Albany Country Club.

#### PROGRAM

Breast Tumors By Gene Newland, M.D., Bedford  
 Obstetrics By Avey Baker, M.D., Salem  
 Fractures By Parvin Davis, M.D., New Albany  
 Gall Bladder Surgery By E. D. Clark, M.D., Indianapolis  
 Dinner and program at 6:00 p. m.

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### FOURTH DISTRICT

President P. C. Bentle, Greensburg  
 Secretary Charles Overpeck, Greensburg  
 Councilor M. C. McKain, Columbus  
 Date and place of meeting: MAY 20, at GREENSBURG.

#### PROGRAM

For the thirty-second annual meeting of the Fourth District Medical Society, the program is as follows:  
 Registration—Y. M. C. A.  
 9:00 a.m. to 12:30 p.m.—Golf.  
 11:30 a.m.—Meeting of House of Delegates at Y. M. C. A.  
 12:30 p.m.—Luncheon.  
**Scientific Session:**  
 1:30 p.m.—Medical Russia. By P. C. Bentle, M.D.  
 2:00 p.m.—Non-Calculus Cholecystitis. By W. H. Stemm, M.D.  
 Discussion—W. E. Thomas, M.D.  
 2:30 p.m.—Recess.  
 2:35 p.m.—Uses and Results of Sympathectomy. By M. C. McKain, M.D.  
 3:05 p.m.—Discussion—C. C. Morrison, M.D.  
 3:15 p.m.—Subject to be announced. By T. A. Hendricks.  
 4:15 p.m.—Subject to be announced. Louis Segar, M.D.  
 6:00 p.m.—Banquet at the M. E. Church.  
 Speaker: Max Bahr, M.D., Indianapolis.

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### FIFTH DISTRICT

President E. H. Dowell, Rockville  
 Secretary James V. Richart, Terre Haute  
 Councilor O. O. Alexander, Terre Haute  
 Date and place of meeting: MAY 1, at HOTEL DEMING,  
 TERRE HAUTE.

This will be a joint meeting of the Fifth District Medical Society, the Terre Haute Academy of Medicine, and the Aesculapian Society of the Wabash Valley.

#### PROGRAM

Principal Speaker: George Crile, M.D., Cleveland, Ohio.  
*(Details of program not available)*

### SIXTH DISTRICT

President J. L. Allen, Greenfield  
 Secretary Frank Green, Jr., Rushville  
 Councilor Samuel Kennedy, Shelbyville  
 Date and place of meeting: MAY 21, at SHELBYVILLE.

#### PROGRAM

10:00 a.m.  
 Recognition and Treatment of Cardiac Irregularities By Johnson McGuire, M.D., of Cincinnati  
 Pediatrics By Louis Segar, M.D., Indianapolis

2:00 p.m.  
 Rectal Diseases Most Frequently Encountered in General Practice By Homer H. Wheeler, M.D., Indianapolis  
 Cancer By B. G. Keeney, M.D., Shelbyville  
 Relationship of Indiana Bureau of Maternal and Child Health to the Local Medical Society By Howard B. Mettel, M.D., Director of the Indiana Bureau of Maternal and Child Health.

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### SEVENTH DISTRICT

President C. M. Pitkin, M.D., Martinsville  
 Secretary Russell Sage, Indianapolis  
 Councilor C. J. Clark, Indianapolis  
 Date and place of meeting: Fall. Announcement will be made preceding meeting.

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### EIGHTH DISTRICT

President R. H. Beeson, Muncie  
 Secretary V. G. McDonald, Anderson  
 Councilor M. A. Austin, Anderson  
 Date and place of meeting: At MUNCIE.

#### PROGRAM

*(Not received)*

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### NINTH DISTRICT

President Gordon A. Thomas, Lafayette  
 Secretary J. C. Burkle, Lafayette  
 Councilor F. T. Romberger, Lafayette  
 Date and place of meeting: MAY 19, at LAFAYETTE.

#### PROGRAM

Registration—At St. Francis High School (in connection with St. Elizabeth Hospital).  
 Golf Tournament—Annual district golf tournament will be held at the Lafayette Country Club.

Scientific Program—  
 10:30 a.m.—Clinic at St. Elizabeth Hospital.  
 Subject: The Acute Abdomen, by Frederick A. Collier, M.D., Ann Arbor.  
 12:00 m. —Lunch at the Lafayette Country Club for Councilors, Delegates, County Society Presidents, and Secretaries.

1:45 p.m.—Subject: Treatment of Acute and Chronic Empyema. By Jerome R. Head, M.D., Chicago.  
 Discussion: Charles P. Emerson, M.D., Indianapolis.  
 2:45 p.m.—Subject: Management and Control of Communicable Diseases. By William H. Park, M.D., New York.  
 Discussion: Verne K. Harvey, M.D., Indianapolis.

3:45 p.m.—Subject: The Ophthalmoscope as a Help in Diagnosis of Disease. By Robert J. Masters, M.D., Indianapolis.  
 Discussion: C. A. Robinson, M.D., Frankfort, R. R. Calvert, M.D., Lafayette.

*Banquet*—7:00 p.m.—Ball Room at Purdue Memorial Union Building.  
 Speaker: Professor Barton Reese Pogue, Indiana University. Subject: "Lifter of Laughter."  
*Entertainment for Women*—Registration at St. Francis High School, where they will be received by a committee of wives of local physicians.  
 Banquet at 7:00 p.m.

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**TENTH DISTRICT**

President \_\_\_\_\_ J. C. Brown, Valparaiso  
 Secretary \_\_\_\_\_ G. R. Douglas, Valparaiso  
 Councilor \_\_\_\_\_ N. K. Forster, Hammond  
 Date and place of meeting: APRIL 29, at VALPARAISO.  
*(Program published in April JOURNAL)*

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**ELEVENTH DISTRICT**

President \_\_\_\_\_ G. D. Balsbaugh, North Manchester  
 Secretary \_\_\_\_\_ O. G. Brubaker, North Manchester  
 Councilor \_\_\_\_\_ Ira Perry, North Manchester  
 Date and place of meeting: MAY 20, at MARION, HOTEL SPENCER.

**PROGRAM**

10:00 a.m.—Clinic, Childhood Tuberculosis. By Andrew L. Banyai, M.D., Wauwatosa, Wisconsin. The Nurses Cottage of the Marion General Hospital.  
 2:00 p.m.—Business and Scientific Program, Marine Room, Hotel Spencer.  
 I. The Primitive Tuberclie. By Lall G. Montgomery, M.D., Muncie, Indiana.  
 II. Modern Aspects of the Treatment of Tuberculosis in General Practice. By Andrew L. Banyai, M.D., Wauwatosa, Wisconsin.  
 III. The Treatment of Nephritis. By Arthur B. Richter, M.D., Flora, Indiana.  
 6:00 p.m.—Banquet, Hotel Spencer. James Charbonnier, Ph.D., Head of the Department of Theology and Romance Languages of Taylor University, will discuss some of the European problems.

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**TWELFTH DISTRICT**

President \_\_\_\_\_ W. W. Swarts, Auburn  
 Secretary \_\_\_\_\_ A. J. Sparks, Fort Wayne  
 Councilor \_\_\_\_\_ E. M. VanBuskirk, Fort Wayne  
 Date and place of meeting: MAY 28, at POTOWATOMIE INN, LAKE JAMES.

**PROGRAM**

*(Program not completed in time for publication. Speakers will include Dr. R. L. Sensenich, of South Bend, president, Dr. E. D. Clark, of Indianapolis, president-elect, and Thomas A. Hendricks, executive secretary of the Indiana State Medical Association.)*

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**THIRTEENTH DISTRICT**

President \_\_\_\_\_ Mark Piper, Rochester  
 Secretary \_\_\_\_\_ J. M. Fleming, Elkhart  
 Councilor \_\_\_\_\_ W. B. Christophel, Mishawaka  
 Date and place of meeting: NOVEMBER 4, at ELKHART.  
*(Program will be published when arranged)*

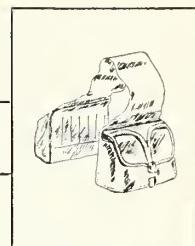
**DIPHTHERIA DEATHS  
IN MARCH, 1936**

There were thirteen deaths from diphtheria during the month of March in Indiana. This is a figure which is rather alarming. Of this number nine were under school age, two were six years of age, one seven years, and one ten years of age. There were no adults. The moral is plain, that we must do something about the young children. It is also now perfectly clear that we need not expect immunization to prevent disease unless everyone is immunized. At one time it was believed that if one-half or less of the children were immunized, the disease would be controlled. This is definitely not true. It will be necessary to immunize *all* children under ten years of age.

The distribution of the deaths by counties for the month of March, and for the period of the year is given in the table following:

County	No. for Month March, 1936	No. for Year 1936
Allen	0	2
Brown	1	3
Cass	0	1
Clark	0	1
Delaware	0	1
Dubois	0	1
Elkhart	1	2
Grant	0	1
Greene	0	2
Howard	1	2
Jennings	0	1
Knox	1	1
Lake	0	1
Lawrence	1	2
Madison	0	4
Marion	3	6
Martin	0	1
Montgomery	0	1
Owen	1	1
Parke	0	2
Pike	1	1
Ripley	0	1
Saint Joseph	0	2
Tippecanoe	1	3
Vanderburgh	1	3
Vigo	1	1
Warren	0	1
Washington	0	1
<b>Totals</b>	<b>13</b>	<b>49</b>

THURMAN B. RICE, Chairman,  
*Diphtheria Prevention Committee.*



## Indiana Medicine in Retrospect

L. G. ZERFAS, M.D.  
Historian, Indiana State Medical Association

### MEDICAL INFLUENCE IN THE FORMATION OF THE STATE

The influence of men with medical training on what is now Indiana was felt long before any definite laws for the regulation of doctors were passed. The Territory had so few physicians that there probably was no necessity for their regulation.

Indiana was first governed under the law passed by Congress, July 13, 1787, for the government of the Northwest Territory. This great ordinance was written by Dr. Manasseh Cutler.<sup>1</sup> Dr. Cutler was born May 13, 1742, and graduated from Yale in 1765. After practicing law for a time he was ordained pastor of a church as Ipswich, Massachusetts. He later decided to study medicine, provided himself with a number of valuable medical books, studied under Dr. Elisha Whitney, and accompanied him on his visits to patients. In 1779 he had forty smallpox cases under his care. His interest in medicine evidently remained secondary, for in all the rules and regulations of the Ordinance there was nothing pertaining to the regulation of the practice of medicine.

Major General Arthur St. Clair, the first territorial governor, was educated at the University of Edinburgh and indentured to the celebrated Dr. William Hunter of London, but because of his mother's death, he purchased his time with the money he inherited and obtained an ensign's commission.<sup>2</sup>

One wonders why more regulations in regard to medicine were not introduced, but considering the diversity of the character of the different settlements and the lack of communication between them, they probably would have governed themselves in about the way they actually did, no matter what the legislation provided for them. However, the following proclamation was issued August 23, 1791, regarding smallpox:<sup>3</sup>

To Captain Tipton or senior officer in Command at Fort Washington.

Sir: It has been represented to me that there is a constant Intercourse kept up by the Inhabitants and others with the Settlements on the opposite Side of the Ohio

<sup>1</sup> William Parker Cutler and Julia Perkins Cutler, Life, Journals and Correspondence of Rev. Manasseh Cutler. Robert Clarke & Co., Cincinnati, 1888, Vol. I, pp. 4, 6, 72, and 114. History of Wayne County, Indiana, Vol. I, Inter-state Publishing Co., Chicago, 1884, p. 89.

<sup>2</sup> William Henry Smith, The St. Clair Papers. R. Clarke & Co., 1882, Cincinnati, Vol. I, p. 2.

<sup>3</sup> Clarence Edwin Carter, Territorial Papers of the United States. The Territory Northwest of the River Ohio 1787-1803. Vol. III. Govt. Printing Office, Washington, D. C., 1934, p. 357.

River by which Means the small Pox may be communicated to the Army and produce very fatal Consequences to prevent which, it is my Desire that you would cause to be collected all the water craft upon this Shore at present, or which may arrive hereafter, and place them under your Boat Guard.

This is not meant to prevent the People from passing up or down the river or to any Place where the Infection of the small Pox may not be, and for which Purposes they may obtain their particular Craft upon sufficient Responsibility that they shall not be used to contravert my Intention, and that they be returned to the Boat Guard every Evening at Sun Setting until they be permitted to keep them: For all which this shall be your sufficient Warrant.

Given under my Hand and Seal at Cincinnati in the County of Hamilton and Territory of the United States north-west of the River Ohio August 23d, 1791—

Winthrop Sargent  
now vested with all the Powers of the Governor  
and Commander in Chief of the Territory.

Most of the laws of Indiana Territory adopted on January 12, 1801,<sup>4</sup> were taken from the New York, Pennsylvania, and Virginia codes, and these states had only quarantine laws and fee regulations, except for an act of the New Jersey legislature in 1772 and one in New York in 1797, regulating the training of a practicing physician.<sup>5</sup> Indiana Territory did not include any of these laws.

Again Indiana had a governor who had studied medicine, but who was more interested in a military career. Governor William Henry Harrison was a student first under Dr. Alexander Humphreys, of Staunton, Virginia, who was also the preceptor of such distinguished men as Dr. Samuel Brown of Transylvania University, Dr. Ephraim McDowell, of Danville, Kentucky, and Dr. Andrew Kean. Governor Harrison next studied under Dr. Andrew Leiper, of Richmond, Virginia, but after the death of his father, he went to Philadelphia and studied under Dr. Benjamin Rush.<sup>6</sup> In 1792 George Washington gave him a commission as ensign and much against the advice of his friends he gave up the study of medicine and started his military and political career.

Thomas Posey became governor of Indiana Territory in 1813 and the following law was enacted De-

<sup>4</sup> Laws adopted by the Governor and Judges of the Indiana Territory, at their first Sessions held at Saint Vincennes, January 12th, 1801. Printed by William Hunter, Frankfort, (K.), 1802.

<sup>5</sup> Francis R. Packard, M.D., History of Medicine in the United States. Paul B. Hoeber, Inc., New York, 1932. Vol. I, pp. 173-175.

<sup>6</sup> Wyndham B. Blanton, M.D., Medicine in Virginia in the 18th Century. Garrett & Massie, Inc., Richmond, Va., 1931, p. 79.

ember 31, 1813,<sup>7</sup> and repealed September 10, 1814:

"Be it further enacted, That no practicing physician shall in future be eligible to act as a judge of the superior or inferior courts of record within this territory, under penalty of five hundred dollars, recoverable by indictment for the use of the proper county."

On December 26, 1815, there was approved an act concerning insane persons where twelve intelligent men, at least one of whom must be a physician, were to be the judges of a person's insanity.<sup>8</sup>

The election of members to the first Constitutional Convention was held May 13, 1816, and Dr. Ezra Ferris of Dearborn County and Dr. David Hervey Maxwell of Jefferson County became members. The manuscript of the constitution was in the handwriting of Dr. Maxwell and his influence and contributions will be given later in his complete biography.



*Ezra Ferris, 1783-1867*

The first state election took place on August 5, 1816, and Jonathan Jennings was elected governor. Mr. Jennings' father was Dr. Jacob Jennings of Pennsylvania, and Mr. William Mitchell of Corydon, Indiana, has the day book kept by Dr. Jennings in 1767. Dr. Jacob Jennings was also a Presbyterian minister and his wife was said to have held a doctor's degree.<sup>9</sup> Governor Jennings married the sister of Dr. Andrew Paxton Hay of Charlestown, and his own sister married Dr. David G. Mitchell of Corydon, so Governor Jennings was probably very medical-minded.

<sup>7</sup> Acts of Assembly of the Indiana Territory Passed at the Second Session of the 4th General Assembly of Said Territory. Hendricks & Camron, Madison, 1814, p. 131, Chapter XXIX, Sec. 17, An Act re-organizing courts of Justice, approved Dec. 31, 1813.

<sup>8</sup> The Laws of Indiana Territory, 1809-1816, edited by Louis B. Ewbank and Dorothy L. Riker, Indiana Historical Collections, Vol. XX, Indianapolis, 1934, p. 650, Chapter XVIII: An Act Concerning Insane Persons.

<sup>9</sup> Records from William Mitchell, Corydon, Indiana. Mabel C. Morrison, Ann Gilmore Hay. John E. Hampton, Indianapolis, 1925.

The first General Assembly began its session at Corydon, November 4, 1816. On Monday, November 13, 1816, according to the Journal of the Senate,<sup>10</sup> "it was ordered that the petition of John Shrynn<sup>11</sup> and others of Jackson County, praying that an act may be passed regulating the practice of medicine be referred to a select committee with leave to report thereon by bill or otherwise. And the same was appointed consisting of Messrs. Ferris, Polke, and Grass."

Dr. Ezra Ferris was born at Stanwich, Connecticut, April 26, 1783, the son of Isaac Ferris. His father emigrated to Columbia, Hamilton County, Ohio, when Dr. Ferris was only six years old, but he had a vivid and distinct recollection of the occasion. He wrote:<sup>12</sup>

"On September 20, 1789, his family with two other families took their departure. Their route was along the road on the north side of Long Island Sound to New York, thence through New Jersey and Pennsylvania and over the Allegheny Mountains to the Monongahela River; thence by boat to Fort Miami, where they arrived December 12, 1789, having been two months and twenty days on the journey."

Ezra Ferris had the benefit of such schools as could be supported at Columbia during the Indian War, and after the return of peace, obtained a good education in a good school in one of the eastern states. His education was quite a liberal one for the son of an early western emigrant. We do not know where he received his medical education, whether in the east or with some doctor in Ohio. He also preached at the Duck Creek Baptist Church and was later ordained. For some years he taught school at Lebanon, Ohio, then he removed to Lawrenceburgh, Indiana, and there practiced medicine and also preached to the destitute Baptist churches of that vicinity. He was elected a member of the convention which formed the constitution of Indiana. He was state senator from 1816 to 1821 from Dearborn County and was a representative in 1821-1822. He was one of the directors of the Farmers' and Mechanics' Bank of Indiana in 1821. He was appointed one of the first censors for licensing physicians from the Third Medical District. He was also censor in 1826-1827. He married first Catherine Thornell and second Amanda Abbott and had twelve children. In 1826 Dr. Ferris was preceptor to his son, Dr. Marmaduke E. Ferris. In 1851 he published a series of articles on the early settlement of the Miami Valley. He died April 19, 1857, at Lawrenceburgh, Indiana.

<sup>10</sup> Journal of the Senate of the State of Indiana at their First Session at Corydon. Cox & Nelson, Printers to the State, of the House of Representatives of the State of Indiana at their first Session at Corydon. Cox & Nelson, Printers to the State, Corydon, 1816, pp. 52, 64, 72, 75, 82, 89 and 90.

<sup>11</sup> We have been unable to locate more information about this petition or anything about John Shrynn of Jackson County and we will appreciate it if anyone can give us any further information.

Corydon, 1816, PP. 24, 34, 35, 36, 38, 60, 61, 63. Journal

<sup>12</sup> History of Dearborn, Ohio, and Switzerland Counties, Indiana. Weakley, Harraman & Co., Chicago, 1885, p. 167. Julia Henderson Levering, Historic Indiana. G. P. Putnam's Sons, N. Y., 1909, p. 62. Indiana Journal, Indianapolis, February 20, 1827. Records of Ohio Medical College, Registrar's Office, Cincinnati.



## LIAISON COMMITTEE REPORT

The following is the preliminary report of the special liaison committee appointed by Dr. R. L. Sensenich to work with Wayne Coy, administrator of the Social Security program in Indiana, to formulate a plan involving the crippled children program in this state. A director to take charge of the medical services involved under the federal and state legislation recently adopted has not as yet been named.

Indianapolis, Indiana,  
April 14, 1936.

Dear Doctor Sensenich:

At your request, we met with Dr. Sarah Deitrick, head of the Federal Children's Bureau, in the office of Mr. Wayne Coy, April 9, 1936, Mr. Marshall being present. From them we learned:

1. The Federal Government offers a certain sum to each state and province. This must be matched dollar for dollar by the state or province and the total amount used for the medical or surgical care of the crippled children of such state or province. The amount allotted to Indiana to be expended within the fiscal year ending July 1st is \$23,025.48, but under present conditions of urgency it may run into the next fiscal year.

2. Dr. Deitrick has visited some eight or nine states which she says are working out plans to comply with the Federal Act. These states do not have a uniform set-up, but each of them has adopted one that it considers best meets its needs. None of them fulfill the requirements of our state.

3. The Indiana Act calls for the appointment of a Director of the State Welfare Committee, who is to be responsible for his department.

Definite and tangible plans for the care of crippled children must be dependent upon their number, their surgical and medical requirements and their geographical location. We feel that a plan should not be submitted until after the appointment of the director and the above information is obtained as a working basis.

Yours sincerely,

L. A. ENSMINGER, M.D.,  
LOUIS D. BELDEN, M.D.

Attendance at recreation activities sponsored by the recreation division of the Works Progress Administration in Indiana during the past month totaled 1,220,462, of which 865,895 were participants, according to a report from the state WPA headquarters.

There are now fifty-six recreation projects in operation in Indiana, each sponsoring six types of activities. These are physical activities, including all types of indoor and outdoor games; cultural, including dramatics, music and crafts, which includes various types of handicraft work; special programs; social activities, and game room activities. There are 1,456 workers from WPA rolls engaged in supervising recreation projects. Assistant supervisors and laborers are provided by the National Youth Administration, there being 3,120 persons between the ages of 16 and 25 who are receiving work on recreation projects. A group of 898 volunteer workers brings the total of persons working on projects to 5,474.

The Indiana state clemency commission has denied a parole to Harry Franklin who is serving a three to ten-year sentence in the Indiana state prison for performing an abortion. He was sentenced in the Marion County, Indianapolis, Criminal Court on July 18, 1933. Franklin gave his occupation as that of a physician, but the trial prosecutor stated that he was posing as a doctor and had no right to do so. His record showed that he escaped once from the state penal farm where he was serving a sentence and was given a two to five-year sentence for the escape. He also served a two to twenty-one-year sentence in the Ohio state prison for forgery, and a one-year sentence in Indiana for grand larceny.

Below is a list of the persons licensed to practice in Indiana for the period from January 1, 1936, to and including March 31, 1936:

John Bernard Berkebile	1/15/36
Joseph Frank Carlo	1/16/36
Albert Heard (Colored)	1/16/36
Robert A. Nason	1/20/36
John A. Melyn	1/21/36
Chas. A. Gutzmer	1/21/36
Archie E. Brown	1/24/36
Fred D. Stone	1/29/36
Wm. Bo Martin	1/31/36
Robt. M. McMichael	2/1/36
Raymond F. Carmody	2/13/36
Harold M. Pritchard	2/14/36
Edward L. Van Aelstyn	2/20/36
Everett W. Richardson	3/26/36
Floyd S. Martin	1/12/36
Ralph W. Chappell	1/17/36
George W. Seward	1/31/36
Karl L. Thorsgaard	1/31/36
Wm. L. Cole	1/31/36
Willis J. Bogue	2/4/36
David C. Botorff	2/8/36
Richard M. Anderson	2/8/36
Kenneth L. Roper	2/19/36
Joseph H. Baltes	2/24/36
Walter J. Rissing	2/24/36
Harry Pandolfo	2/28/36
Eugene Schumacher	2/28/36

## MEDICO-LEGAL COLUMN

### MEDICAL ASSISTANCE FROM TOWNSHIP TRUSTEES FOR WPA WORKERS

The status of WPA workers under the Act of the General Assembly of 1935, page 434, with reference to hospital and medical care, was first presented to the attorney general through an inquiry of Mr. Albert G. Hahn, administrator of the Deaconess Hospital in Evansville. Mr. Hutchinson, the assistant attorney general, on January 28, 1936, in reply to that inquiry stated that a WPA worker "would occupy exactly the same position as any other person who may have some means of support but not sufficient to meet the emergency."

While this opinion from the office of the attorney general did not refer to medical care and attention, it seemed reasonable to put the services of physicians in the same class as the services of the hospital. To verify that view our attorney wrote to the attorney general asking his interpretation of the law in regard to medical care. Our attorney felt the question of medical care was of sufficient public interest that it would be proper to present that question to the attorney general. On March 10, 1936, he received an unofficial statement from the attorney general to the effect that the WPA worker might still receive medical aid from the township trustee. The letter reads as follows:

March 10, 1936.

Dear Sir:

I acknowledge your letter of March 3 in behalf of the Indiana State Medical Association, relative to an interpretation of the law in regard to medical care for indigent persons where the family is being given work on a WPA project.

As you understand, under the law, I am not permitted to give official opinions to anyone other than state officers, boards, departments, bureaus and commissions, but I think the law is plain upon the question in which you are interested.

I believe when a member of an indigent family is given work on a WPA project, that does not necessarily mean that the township trustee is absolutely prohibited from providing hospitalization or medical care for any member of such family. I believe any member of the family would occupy exactly the same position as any other person who is in need.

Section 5, Chapter 116 of the Acts of 1935 is definitely plain in my opinion. It reads:

"Sec. 5. The overseer of the poor in each township shall have the oversight and care of all poor persons in his township so long as they remain a charge, and shall see that they are properly relieved and taken care of in the manner required by law. He shall, in cases of necessity, promptly provide medical and surgical attendance for all of the

poor in his township who are not provided for in public institutions; and shall also see that such medicines and/or medical supplies and/or special diets and/or nursing as are prescribed by the physician or surgeon in attendance upon the poor are properly furnished."

Yours Very Truly,

(Signed) PHILLIP LUTZ, JR.,  
Attorney General of Indiana.

## SECRETARIES' COLUMN

Remember the A. M. A. meeting in Kansas City, May 11 to 15.

One member has sent a letter of thanks for the reminder sent to him from the headquarters office about 1936 dues. This doctor pleads for the secretaries to send out reminders to members. Doctors in Vigo County receive statements on the first of December. It makes my job of collecting dues easier. Have some statements printed, send them out on December 1, and watch the results. I am sure that you will be surprised.

Every county medical society secretary should find out how the senator and representative in his district voted in the special session of the legislature. If they voted against amendment 129½, write a letter of appreciation to them. Other days are coming.

More than 650 registered for the annual post-graduate course in Indianapolis. Were you there?

May 10 is Mother's Day. This is a day that can be celebrated with a program on maternal welfare. The county society should arrange a program before some civic body in the community, or on the radio, if that is available. It is the duty of the medical society to advocate preventive medicine as well as curative medicine. Literature on this subject has been sent to you from headquarters; use it!

Have you studied the State Social Security Act?

Dr. Howard Mettel has been appointed director of child and maternal welfare, and he has prepared an explanation of the work which will be undertaken. The article is published on page 245 in this issue. Read it thoroughly.

Did you read, in the last *Bulletin* of the A. M. A., the plan to follow in the summer round-up of children?

*Accomplished*

Chairman.

## DEATH NOTICES

DAWSON D. VAN OSDOL, M.D., of Rushville, died March twenty-fourth. Dr. Van Osdol was sixty-six years old. He was a member of the Rush County Medical Society, the Indiana State Medical Association, and the American Medical Association. Dr. Van Osdol graduated from Miami Medical College, Cincinnati, in 1894.

ROBERT W. CLAYPOOL, M.D., of Mellott, died March thirtieth, aged seventy-eight years. Dr. Claypool had been in ill health for a long time. He had practiced in Attica and in Newtown, and for the past eighteen years had been in Mellott. Dr. Claypool graduated from Rush Medical College, Chicago, in 1881.

KARL N. BARTLEY, M.D., of Marion, died March eighth. Dr. Bartley was fifty-seven years old. He had retired from the practice of medicine. Dr. Bartley graduated from the Central College of Physicians and Surgeons in Indianapolis in 1901.

PETER N. HOOVER, M.D., of Boonville, died April second, aged eighty-four years. Dr. Hoover was the oldest practicing physician in Warrick County where he had practiced medicine more than fifty years. He was a member of the Warrick County Medical Society, the Indiana State Medical Association, and the American Medical Association. He graduated from the Kentucky School of Medicine, Louisville, in 1881.

ANDREW P. LETHERMAN, M.D., of Valparaiso, died March twenty-first. Dr. Letherman was eighty-six years old. He had been a practicing physician in Valparaiso for more than fifty-five years, and was a member of the city board of health. He was an honorary member of the Porter County Medical Society and the Indiana State Medical Association. He was a graduate of the Louisville Medical College, Kentucky, in 1871.

DANIEL E. CRIPE, M.D., of Hillsburg, died April eighth, aged eighty-five years. Dr. Cripe was a graduate of the American Medical College, Indianapolis, in 1895.

CHRISTOPHER H. REYHER, M.D., of Gary, was killed February 12 when his automobile was struck by a train. Dr. Reyher was fifty-five years of age. He was a member of the Lake County Medical Society, the Indiana State Medical Association, and the American Medical Association. He had served as Gary health commissioner. He graduated from the Northwestern University Medical School, Chicago, in 1906.

## HOOSIER NOTES

Dr. M. C. Thomas has moved from Flora to Indianapolis where he has accepted a position at Sunnyside Sanatorium.

The first international congress of Sanatoria and Private Nursing Homes will be held in Budapest during the month of September, 1936.

Dr. J. F. Buckner has located in North Manchester where he will practice medicine. Dr. Buckner has been located in Bippus.

Dr. J. A. Ritchey, of Jonesboro, has moved to Pittsburgh, Kansas, where he will be associated with Dr. C. H. Benage.

Miss Ruth Wills, of Connersville, and Dr. Otto F. Rogers, of Bloomington, were married in Connersville, March twenty-eighth.

Dr. E. E. Padgett, of Indianapolis, addressed the April second meeting of the Anderson Business and Professional Women's Club on the subject of "Cancer Control."

The twelfth scientific session of the American Heart Association will be held May twelfth, at the Hotel Phillips, Kansas City, Mo. The program will be devoted to Cardiac Insufficiency.

The American Association for the Study and Control of Rheumatic Diseases will hold its fifth conference on rheumatic diseases at the Phillips Hotel, Kansas City, May eleventh.

Dr. Malcolm L. Harris, prominent Chicago surgeon and former president of the American Medical Association, died March twenty-first. Dr. Harris was seventy-three years old.

Dr. Ray Borland, of Bloomington, addressed the April first meeting of the Linton Business and Professional Women's Club on the subject, "Sterilization of the Unfit."

Dr. Jean Morris, of Muncie, has moved to Hartford City where he will take over the practice of Dr. George Moore. Dr. Moore is planning to do postgraduate work at the University of Michigan.

Dr. C. C. Crampton, of Delphi, received a prize for his essay, "The Big Moment," in an essay contest sponsored by the National American Legion Monthly.

The South Bend unit of the American Association of University Women was addressed by Dr. Maud Slye, of Chicago, March twenty-fourth. Dr. Slye talked about research work in cancer.

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The Irene Byron Sanitarium in Fort Wayne will receive \$10,000 through the will of the late Dr. Eric Crull. Dr. Crull was a founder and former superintendent of the institution.

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Dr. F. Morse Nichols, of Topeka, spoke on "Socialization of Medicine" at the meeting of the Business and Professional Women, April second, in Lagrange.

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Dr. Kathryn M. Whitten, of Fort Wayne, read a paper on "Personality Twists" before local members of the American Association of University Women in Marion, April eighth.

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Dr. C. J. Brockway, of Brookston, gave a travel-talk on Mexico and other Central American countries at the April meeting of the Brookston Parent-Teacher Association.

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The Indianapolis City Hospital was the recipient of \$8,800 presented by representatives of the Seventh District Federation of Women's Clubs. The money was used to purchase radium for use in the cancer clinic of the hospital.

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Dr. and Mrs. Will Moore and their two children sailed from New York, April twenty-fifth, for Europe, where they intend to tour Italy, Austria, Switzerland, France, and Germany. Dr. Moore will do postgraduate work in Austria.

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Dr. F. T. Romberger, of Lafayette, addressed the staff meeting of the St. Francis Hospital in Indianapolis in Beech Grove, March twenty-sixth. His subject was "Selective Anesthesia from a Chemical Viewpoint."

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Dr. C. J. McIntyre, of Indianapolis, attended the meeting of the National Tuberculosis Association in New Orleans, April 22-25. He visited some of the historical places of interest on the going and returning trip.

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**Correction:** In the April issue, it was stated that Dr. and Mrs. C. F. Hope had returned to Loogootee from Ellettsville. Dr. and Mrs. Hope have moved to Shoals where Dr. Hope will practice.

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Newspaper announcements carry the information that Dr. H. E. Greist, member of the Indiana

State Medical Association, in charge of the Presbyterian mission hospital in Barrow, Alaska, will give up his post this summer. The Federal government will take charge of the hospital soon.

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The annual meeting of the American Association for the Study of Goiter will be held June 8, 9, and 10, 1936, in Chicago, Illinois. A copy of the program may be obtained from the corresponding secretary, Dr. W. Blair Mosser, Kane, Pennsylvania.

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A ten-day training course in first aid was held at Purdue University in April. The course was sponsored by the Public Safety Institute of Purdue, and was conducted by Dr. Laurance M. Thompson, field representative of the American Red Cross, Washington, D. C.

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The American Niesserian Medical Society will hold its second annual meeting May 18, 1936, in the Hotel Statler, Boston. Programs may be obtained by addressing Oscar F. Cox, Jr., M.D., Secretary, 475 Commonwealth Avenue, Boston, Massachusetts. Interested physicians are invited to attend.

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Dr. O. W. Brownback, retired physician of Pendleton, Indiana, celebrated his ninetieth birthday on March twenty-third. Dr. Brownback located in Pendleton in 1867, and has been active in community affairs during all the years of his residence there. He has served as secretary of the board of health for about ten years.

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Members of the newly organized Northern Indiana Society for Crippled Children, at a meeting in South Bend March thirty-first, were told that there are 178 crippled children in South Bend and St. Joseph County. Dr. W. H. Baker was authorized to continue as chairman of the survey committee for the society, and to extend the survey and devise a plan for following up the cases found.

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The sixth Indiana pharmacists' business conference was held at Purdue, March twenty-fifth and twenty-sixth. Speakers on the program included Dr. Morris Fishbein, editor of *The Journal of the A. M. A.*, and Dr. Howard W. Haggard, of Yale University. Dr. Haggard's subject was "Medical Fads and Superstitions," and Dr. Fishbein talked on "Socialized Medicine."

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The Indiana Academy of Ophthalmology and Otolaryngology met at the Home Lawn Sanitarium, in Martinsville, April eighth. Dr. L. W. Dean, of St. Louis, was the guest speaker; his subject was, "Some Observations Regarding Allergic Rhinitis."

Officers were elected as follows: president, Dr. W. F. Huges, Indianapolis; first vice-president, Dr. Edgar C. Davis, Muncie; second vice-president, Dr. Carroll O'Rourke, Fort Wayne; secretary-treasurer, Dr. Marlow W. Manion, Indianapolis. The society changed its constitution so that all future meetings may be held in Indianapolis, where the 1937 annual meeting will be held.

The Northern Tri-State Medical Association met in Fort Wayne, for its sixty-third annual convention, April fourteenth. Meetings were held at the Chamber of Commerce; headquarters for the convention was the Hotel Keenan. Speakers included Dr. Ferris Smith, of Grand Rapids, Michigan; Dr. Archibald Hoynes, of Chicago; Dr. William E. Lower, of Cleveland, Ohio; Dr. A. J. Carlson, of Chicago; Dr. Clifford J. Barborka, of Chicago; Dr. Max M. Peet, Ann Arbor; Dr. Robert M. Moore, Indianapolis; Dr. Claude F. Dixon, Rochester, Minnesota; Dr. Louis H. Segar, Indianapolis, and Dr. Claude S. Beck, Chicago. Officers elected for 1937 are Dr. W. H. Marshall, Flint, Michigan, president; Dr. G. E. Jones, Lima, Ohio, vice-president; Dr. J. N. Kelly, LaPorte, treasurer; Dr. R. H. Elrod, Toledo, Ohio, secretary. Councilors are Dr. L. T. Rawles, Fort Wayne; Dr. Bert Hibbard, Lima, and Dr. W. M. Donald, Detroit. Jackson, Michigan, was selected as the 1937 convention city.

#### A. M. A. GOLFERS

The American Medical Golfing Association will hold its twenty-second annual tournament at the Mission Hills Country Club and the Kansas City Country Club in Kansas City on Monday, May eleventh. All male Fellows of the American Medical Association are eligible and are cordially invited to become members of the A. M. G. A. The executive secretary is Bill Burns, 2020 Olds Tower, Lansing, Michigan, from whom an application blank may be obtained. Participants in the tournament are required to furnish their home club handicap, signed by the secretary.

#### WOMAN'S AUXILIARY

At the call of Mrs. R. L. Compton of Richmond, president of the Indiana State Medical Association Auxiliary, there was a meeting of the officers of the State Auxiliary at the Columbia Club in Indianapolis, March eighteenth. In addition to the routine work, there was announced the establishment of two new units to the Auxiliary, one in South Bend and the other in New Albany. It also was noted that an additional unit is in the process of development in Michigan City.

Mrs. Compton presided at the luncheon which was attended by Mrs. Ernest O. Nay, Mrs. M. B. Van Cleave, and Mrs. John J. Connelly, Terre Haute; Mrs. H. L. Cooper and Mrs. H. W. Helman, South Bend; Mrs. Clarence L. Bock, Mrs. U. G. Poland and Mrs. I. N. Trent, Muncie; Mrs. James W. Baxter, Jr., New Albany; Mrs. J. Crede Miller, Frankton; Mrs. Fred B. Wishard, Anderson; Mrs.

George R. Dillinger, French Lick; Mrs. M. Ravdin, Evansville; and Mrs. John T. Wheeler, Mrs. D. O. Kearby, Mrs. E. E. Padgett, Mrs. O. G. Pfaff, Mrs. J. C. Carter and Mrs. E. D. Clark, Indianapolis.

#### POSTGRADUATE WEEK

With a total registration of 653, the Graduate Education program presented in Indianapolis, April 6-11, under the direction of the Indiana University School of Medicine and the Indiana State Medical Association, was an outstanding success. Of the total attendance, 227 were medical students, and 426 were physicians, 251 of whom were outside of Indianapolis. Throughout the week clinics and pathological conferences were conducted each morning at the University hospitals, while the afternoon and evening programs were divided between the University and the Riley Room of the Claypool Hotel.

Guest speakers upon the University program included Dr. Ralph Major, of the University of Kansas, who spoke on "Hippocratic Medicine," Dr. Walter Palmer, of the University of Chicago, whose subject was "Stomach Ulcers," and Dr. Willis Campbell, of the University of Tennessee, who spoke on "Ununited Fractures of the Humerus."

Afternoon and evening programs on Wednesday and Thursday, April 8 and 9, were held at the Riley Room of the Claypool Hotel, under the direct sponsorship of the Graduate Education Committee of the Indiana State Medical Association and were limited to discussions of heart diseases and neoplastic diseases. The out-of-state guest speakers for this part of the program were Dr. Dean Lewis, of Johns Hopkins, Dr. Gatewood, of Rush Medical School, who talked about cancer, and Dr. Louis N. Katz, of the University of Chicago, and Charles C. Wolferth, of the University of Pennsylvania, who talked upon heart ailments. Dr. Gatewood discussed "Malignant Tumors of the Stomach," Dr. Wolferth spoke on "Observations on the Mechanical and Clinical Interpretations of Heart Sounds," while "Neoplastic Diseases" was the subject of Dr. Lewis' talk and "Coronary Disease, Its Pathology, Management and Outlook" was the subject of Dr. Katz' paper. Special consideration and discussion of these two subjects have been carried on since the first of the year by medical societies throughout the state, and a number of programs upon these two subjects have been arranged under the direction of the Graduate Education Committee for the coming spring meetings in counties and districts.

The Indiana Division of Public Health loaned the lantern equipment which was managed by Mr. N. J. Smallwood.

The manner in which the Indiana University cooperated with the Indiana State Medical Association contributed greatly to the success of the program.

The Association was pleased to have the medical students as guests, and it is hoped that their contacts at these meetings may inspire them toward closer cooperation with organized medicine.

In addition to the articles already enumerated the following have been accepted by the Council on Pharmacy and Chemistry of the American Medical Association:

Abbott Laboratories

Ophthalmic Ointment Butesin Picrate 1% and Butesin 1%  
Cheplin Biological Laboratories, Inc.

Cheplin's Sodium Cacodylate 0.05 Gm. ( $\frac{3}{4}$  grain), 1 cc.

Cheplin's Sodium Cacodylate 0.1 Gm. (1½ grains), 1 cc.

Cheplin's Sodium Cacodylate 0.2 Gm. (3 grains), 1 cc.

Cheplin's Sodium Cacodylate 0.3 Gm. (5 grains), 1 cc.

Cheplin's Sodium Cacodylate 0.5 Gm. (7½ grains), 1 cc.

Cheplin's Sodium Cacodylate 1.0 Gm. (15½ grains), 2 cc.

Lakeside Laboratories, Inc.

Ampoule Solution Sodium Cacodylate 3 grains (0.195 Gm.), 1 cc.

Eli Lilly and Company

Tablets Amytal  $\frac{3}{4}$  grain

Ophthalmic Ointment Metycaine 4%

National Drug Company

Antipneumococcic Serum-Felton—Type I (Refined and Concentrated)

Antipneumococcic Serum-Felton—Types I and II (Refined and Concentrated)

Parke, Davis & Co.

Kapsseals of Ortal Sodium with Phenacetin

U. S. Standard Products Co.

Scarlet Fever Streptococcus Toxin for Immunization

Ampule Compound Solution of Calcium Gluconate 10%, 10 cc.

Arlington Chemical Company

Arleo Protein Extracts

Mead Johnson & Co.

Mead's Oleum Percomorphum 50% (Percomorph Liver Oil 50% in Cod Liver Oil)

Mead's Oleum Percomorphum 50% (Percomorph Liver Oil 50% in Cod Liver Oil) in 10-drop (.222 Gm.) Capsules

Mead's Cod Liver Oil Fortified with Percomorph Liver Oil

United States Standard Products Co.

Ampule Solution Procaine with Epinephrine 1 cc.

The Valentine Company

Solution Liver Extract—Valentine

neck, bacteriology, immunology, plastic surgery of the head and neck, neoplasms of the head and neck, diseases of the middle ear, disorders of the cochlea and vestibular apparatus, acute and chronic mastoiditis and complications, diagnosis and surgery in sinusitis, non-surgical treatment of the nasal sinuses, diseases of the tonsils and adenoids, and bronchoscopy and esophagoscopy.

Co-related subjects to be presented include the following: biological chemistry, the relation of Ophthalmology or eye diseases to Otolaryngology, Neuro-otology, the X-Ray in diagnosis, X-Ray and radium therapy, principles of surgery and principles of surgery in Otolaryngology.

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Approximately 425 practicing physicians and surgeons enrolled for the annual postgraduate course of the Indiana University school of medicine held in Indianapolis April 6-10. The Indiana State Medical Association cooperated with the course which offered intensive study of the latest achievements and discoveries in medicine.

The postgraduate doctors made the rounds of clinics, lectures, conferences and discussions from 8:30 each morning until 10 o'clock each evening. The morning programs were devoted to clinics, in which the doctors were given an opportunity to observe diagnosis and treatments in the three Indiana University hospitals of cases selected especially for the course.

Medical authorities from other universities brought here to assist the I. U. faculty included the following: Dr. Ralph Major, University of Kansas, authority on the history of medicine; Dr. Walter Palmer, Chicago, known for his work on ulcers of the stomach; Dr. Gatewood (no initials), Rush Medical School, Chicago, a cancer specialist; Dr. Charles C. Wolferth, Pennsylvania, an expert in heart diseases; Dr. Walter W. Hamburger, Chicago, heart specialist; Dr. Dean Lewis, Johns Hopkins University, Baltimore, noted for his surgery; and Dr. Willis Campbell, University of Tennessee, Memphis, who has won recognition for orthopedic surgery.

"We must not only qualify students for the practice of medicine," said an officer of the medical school in expressing appreciation of the large attendance by Indiana physicians, "but also aid them after graduation in an annual review of the latest achievements and discoveries in medicine."

## INDIANA UNIVERSITY NEWS NOTES

The annual postgraduate anatomical and clinical course in otolaryngology, covering diseases of the ear, nose and throat, was held April 13-25 under the direction of Dr. John F. Barnhill at the Indiana University medical center, Indianapolis. Members of the staff in Otolaryngology assisted Dr. Barnhill with the course.

Dr. J. B. Costen, of St. Louis, was the guest speaker at a dinner in connection with the course given at 6 p. m. Sunday, April 12, at the Indianapolis Athletic Club by the Indianapolis Academy of Ophthalmology and Otolaryngology.

Each morning of the postgraduate course was given over to case presentation and surgical procedures from 8 to 11 o'clock. Daily luncheons at noon and dinner at 6 o'clock in the doctors' dining room of the Riley Hospital were followed by round table discussions.

The program of the course covered lectures and demonstrations in the pathology of the head and

Editor's Note: All physicians who are graduates of Indiana University will be interested to know that Dr. Matthew Winters, of Indianapolis, is a candidate for the position of trustee of Indiana University, to take the place of one whose term expires soon. Dr. Winters is a graduate of Indiana University and of Rush Medical College. He was a captain in company A, 356th infantry, A. E. F. He is professor of pediatrics in the Indiana University School of Medicine. Ballots have been mailed to Indiana University Alumni.

## SOCIETIES — INSTITUTIONS

### COUNTY SOCIETY REPORTS

ADAMS COUNTY MEDICAL SOCIETY met in Berne, March twenty-second. Officers were elected. Dr. J. M. Miller was re-elected president, and Dr. Ben Duke was re-elected secretary-treasurer. The principal speaker for this meeting was Dr. A. N. Ferguson, of Fort Wayne.

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CARROLL COUNTY MEDICAL SOCIETY met at Camden, March twelfth, with Dr. G. W. Gustafson, of Indianapolis, as principal speaker. His subject was "Common Obstetrical Problems."

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CASS COUNTY MEDICAL SOCIETY met at St. Joseph Hospital in Logansport, March twentieth. Dr. Beaumont S. Cornell, of Fort Wayne, read a paper on "Cardiovascular Diseases in Middle Life." Attendance numbered fourteen.

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DAVIESS-MARTIN COUNTY MEDICAL SOCIETY members met in the Daviess County Hospital, March twenty-fourth, to hear Dr. John R. Brayton, of Indianapolis, talk on "Primary and Secondary Syphilis." Dr. Brayton also held a skin clinic. Twenty-three members and visitors attended the meeting.

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DEKALB COUNTY MEDICAL SOCIETY members met at the Sanders' Hospital in Auburn, March twelfth, to see motion pictures of surgical procedures.

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DELAWARE-BLACKFORD COUNTY MEDICAL SOCIETY held a meeting in Muncie, March seventeenth. Papers were presented by Drs. Robert Hill, T. R. Hays, and Robert McMichael. Group hospitalization was discussed, and the Business Bureau of the Indianapolis Medical and Dental Society also was discussed. Thirty-five members were present.

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ELKHART COUNTY MEDICAL SOCIETY met in Elkhart, April second, for the annual meeting. The program included addresses by Dr. Jerome Conn, of Ann Arbor, on "Treatment of Diabetes Mellitus"; Dr. W. C. Popp, of Rochester, Minnesota, on "Radiotherapy for Inflammatory Conditions," and Dr. Bernard Fantus, of Chicago, on "Some Advances in Therapeutic Technic." Fifty members attended.

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FLOYD COUNTY MEDICAL SOCIETY met at New Albany, March thirteenth. Dr. William Moore, of New Albany, discussed the history of influenza. Attendance numbered twenty-five.

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FORT WAYNE (ALLEN COUNTY) MEDICAL SOCIETY met in the Chamber of Commerce, March seventeenth, for a dinner meeting. A symposium on heart disease was presented by Drs. B. S. Cornell, H. L. Murdock, E. M. VanBuskirk, A. N. Ferguson, and Allen Hamilton. Attendance numbered thirty-six.

FORT WAYNE (ALLEN COUNTY) MEDICAL SOCIETY met at the Chamber of Commerce, April seventh. Clinical cases were presented by members. Attendance numbered twenty-nine.

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FOUNTAIN-WARREN COUNTY MEDICAL SOCIETY met at Kingman, April second, with Dr. J. W. Ricketts, of Indianapolis, as principal speaker. Dr. Ricketts talked on "Disease of the Rectum and Anus." Attendance numbered thirty-five.

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GRANT COUNTY MEDICAL SOCIETY held its regular monthly meeting at the Hotel Spencer, Marion, March twenty-sixth. Dr. Samuel Weinberg, of Marion, spoke on "Diseases of Old Age."

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GREENE COUNTY MEDICAL SOCIETY met at Linton, March twelfth.

HANCOCK, RUSH AND SHELBY COUNTIES held a tri-county meeting at Greenfield, March sixteenth. Speakers were Dr. Frank Green, Jr., Rushville; Dr. W. L. Pugh, Milroy, and Dr. Donald Dean, Rushville. This was the last of the tri-county meetings until next fall. Approximately forty-two physicians attended the meeting.

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HENDRICKS AND MORGAN COUNTY MEDICAL SOCIETIES held a joint meeting in Danville, March twenty-fourth. Dr. C. J. Clark, of Indianapolis, talked on "Treatment of Heart Disease."

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HUNTINGTON COUNTY MEDICAL SOCIETY held a dinner meeting, April seventh, at the Hotel Lafontaine in Huntington. Dr. Beaumont S. Cornell, of Fort Wayne, read a paper on "Heart Failure."

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INDIANAPOLIS MEDICAL SOCIETY held its March seventeenth meeting at the Athenaeum. A symposium on pediatrics was presented at this meeting and was continued through the March twenty-fourth meetings. Speakers were Drs. Herbert F. Call, Russell Hippenstein, Louis H. Segar, and Howard B. Mettel. The second meeting was entirely clinical and was presented by the pediatric staff members of the Riley Hospital.

The March thirty-first meeting, held at the Athenaeum, was devoted to a symposium on oral pathology. Speakers were Drs. J. Thayer Waldo (dentist), James O. Ritchey, Rollin H. Moser, Daniel L. Bower, and R. H. Benham (dentist).

The April seventh meeting was omitted because of the annual postgraduate meeting held during that week.

On April fourteenth, Dr. Max Bahr, of Indianapolis, presented a paper on "Personality vs. Environment." Dr. J. T. Witherspoon, of the Eli Lilly Company, presented a paper on "The Female Sex Hormones and Their Clinical Application."

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JASPER-NEWTON COUNTY MEDICAL SOCIETY members met at Rensselaer, March twenty-sixth. Dr. Cleveland J. White, of Chicago, talked on "Some of the More Common Skin Diseases." Fourteen members attended.

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JAY COUNTY MEDICAL SOCIETY members met at the Portland Country Club, April third. Dr. H. O. Mertz, of Indianapolis, talked on "The Importance of Urological Disease in the Production of Abdominal Symptoms." Dr. R. H. Moser, of Indianapolis, led the discussion.

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MARSHALL COUNTY MEDICAL SOCIETY met at Plymouth, April first. Dr. C. M. Fish, of South Bend, talked on "Some Common Rectal Diseases."

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MADISON COUNTY MEDICAL SOCIETY members and members of the Madison County Bar Association and Madison County Dental Association held a joint meeting at Anderson, April first, to discuss the new measures adopted by the state legislature at the special session. Senator Walter Vermillion, of Madison County, and Senator Thomas A. Hendricks and Dr. E. D. Clark, of Indianapolis, were speakers. Attendance numbered one hundred.

\* \* \*

MONTGOMERY COUNTY MEDICAL SOCIETY met at Crawfordsville, March nineteenth. Dr. John Warvel, of Indianapolis, was the principal speaker, his subject being "Complications of Diabetes." Thirty-two physicians attended the meeting.

\* \* \*

MUNCIE ACADEMY OF MEDICINE held a meeting at the Hotel Roberts, Muncie, March tenth. Drs. E. V. Hahn and E. Rogers Smith, of Indianapolis, were principal speakers. Their subject was "Head Injuries and Their Medico-Legal Aspects."

At the March thirty-first meeting, Dr. Robert M. Moore, of Indianapolis, was the speaker. His subject was "Diagnosis of Cardiac Pain."

At the meeting of the Academy held April seventh at the Hotel Roberts, with Dr. George Crile, Jr., of Cleveland, as principal speaker. Dr. Crile's subject was "The Medical and Surgical Treatment of Thyroid Diseases."

Dr. Alfred W. Adson, of Rochester, Minnesota, talked on "The Diagnosis of Spinal Cord Tumors" before the April fourteenth meeting of the Muncie Academy of Medicine.

NORTHEASTERN INDIANA ACADEMY OF MEDICINE met in Kendallville, March twenty-sixth. Dr. Herman L. Kretschmer, of Chicago, read a paper on "Urological Problems in Childhood."

\* \* \*

OWENS COUNTY MEDICAL SOCIETY members met in Spencer, March twenty-fifth. Dr. M. D. Smith, dentist, addressed the members.

\* \* \*

PARKER-VERMILLION MEDICAL SOCIETY members met in Clinton, March eighteenth. G. T. Gregory, D.D.S., of Indianapolis, talked on "Oral Pathology Problems of Interest to Medicine and Dentistry." Twenty-one physicians and dentists were present.

\* \* \*

PUTNAM COUNTY MEDICAL SOCIETY met at Greencastle, March tenth. Dr. Murray N. Hadley, of Indianapolis, discussed "Appendicitis in Children." Attendance numbered twelve.

\* \* \*

RANDOLPH COUNTY MEDICAL SOCIETY met March ninth at Union City. Dr. George Bond, of Indianapolis, was the principal speaker.

\* \* \*

SHELBY COUNTY MEDICAL SOCIETY held its regular dinner meeting in Shelbyville, April first. Dr. Frank Gastineau, of Indianapolis, presented a paper on "Common Skin Diseases and Their Treatment." Eighteen members attended.

\* \* \*

ST. JOSEPH COUNTY MEDICAL SOCIETY met at South Bend in the Jefferson Plaza, April first. Dr. Harold Dunlap, of Indianapolis, presented a paper on the "Thyroid." Attendance numbered thirty-two.

\* \* \*

VANDERBURGH COUNTY MEDICAL SOCIETY members met in Evansville, March eighteenth, to hear a symposium on carcinoma and sarcoma, which was presented by Drs. Charles B. McGlumphy, William S. Ehrich, and Robert R. Acre. Gross pathology, specimens, and x-rays were shown. Attendance numbered eighty-five.

\* \* \*

WABASH COUNTY MEDICAL SOCIETY members were guests of Drs. A. J. Steffen, A. P. Rhamy, and J. G. Kidd in Wabash, April first. Speakers for the evening were Drs. B. W. Rhamy, E. M. VanBuskirk, and Harvey Murdock, all of Fort Wayne. The topic was "New and Modern Methods for Diagnosing and Treating Heart Disease."

\* \* \*

WASHINGTON COUNTY MEDICAL SOCIETY met February twenty-fifth. Dr. L. A. Ensminger, of Indianapolis, presented an address on "Fractures."

\* \* \*

WAYNE-UNION COUNTY MEDICAL SOCIETY met in Richmond, April ninth, with Dr. Rollin Moser, of Indianapolis, as principal speaker. Dr. Moser's subject was "Peptic Ulcer."

#### INDIANA STATE MEDICAL ASSOCIATION EXECUTIVE COMMITTEE

March 23, 1936.

Roll call showed the following present: C. A. Nafe, M.D.; Chairman; H. H. Wheeler, M.D.; R. L. Senseman, M.D.; E. D. Clark, M.D.; O. O. Alexander, M.D.; A. F. Weyerbacher, M.D.; Albert Stump, Attorney, and T. A. Hendricks, Executive Secretary.

##### Treasurer's Office

(1) Auditing Committee to be appointed by the president in order that a check-up on Association finances may be made in June.

(2) Chicago apartment bonds. Letter received from the National City Sales Company of Cincinnati in regard to the bonds held by the Association. The Executive Committee felt that as these bonds are increasing in value, it would be well for the Association to hold them.

##### Membership Report

Number of members March 21, 1936	2,382
Number of members March 21, 1935	2,340
Gain over last year	42
Number of members Dec. 31, 1935	2,802

The monthly statement of Receipts and Expenditures and report of the Budget for the Association committees for February were made.

##### 1936 Session at South Bend

(1) The scientific program has been filled with the exception of one speaker to be named by Dr. Giordano, and the selection of a banquet speaker.

(2) Commercial exhibit announcement sent out and twenty-one spaces sold; seventeen to be sold.

(3) President's Badge. Consideration to be held over until next meeting.

(4) Scientific Exhibit Committee. Acceptances received from all members.

##### Legislative, Legal and Social Security Matters

(1) Legislative report in regard to battle with cultists to be carried in April issue of THE JOURNAL along with a review of the public health legislation, to be written by Dr. Verne Harvey, director, State Division of Public Health.

(2) Legislative bulletin in regard to the appointment of local welfare boards and local county directors, emphasizing the importance of having high grade personnel, issued by Legislative Committee and brought to attention of Executive Committee.

(3) Commendation of Dr. Willan. The Executive Committee formally commended Dr. H. R. Willan, Martinsville, representative from Morgan County, for the splendid work he had done as a member of the House of Representatives, both at the regular and the special sessions of the legislature. The Committee urges Dr. Willan to run again for the House.

(4) Physicians in the Legislature. The Committee urges the local county medical societies to get out and back good candidates at this coming primary.

(5) Report on Decision of Supreme Court of Illinois. Albert Stump is to prepare an article to be carried in THE JOURNAL upon the decision of the Supreme Court of Illinois to the effect that a corporation cannot practice medicine in that state.

##### Socialization of Medicine

The Executive Committee is to meet with Dr. William Lowe Bryan to discuss this and other matters and report back to the Committee at its next meeting.

(1) Recommendation received from Dr. M. A. Austin that the Association buy a copy of Dr. E. H. Ochsner's book on "Social Security" for every medical student. This recommendation was considered and laid on the table as the Committee felt that Dr. Ochsner's work was well known and was available to all those in Indiana who are interested in this subject, and as Dr. Austin's suggestion already had been printed in THE JOURNAL.

(2) Situation at Economy, Indiana. The president-elect and the secretary reported upon their trip to Economy, Indiana, and brought newspaper clippings in regard to the situation there to the attention of the Committee. Several of these clippings misrepresented the attitude of the officers of the State Association concerning the Economy plan. The letter prepared by Dr. Clark, correcting these misstatements, and the correspondence in regard to this case were reviewed by the Committee.

##### Graduate Education

Indiana University course April 6 to 11.

Association course April 8 and 9.

Report made that announcements were to be featured in THE JOURNAL and that the Bureau of Publicity was to have a release featuring the Association part of the meeting and that the Indiana University School of Medicine was to send out publicity releases featuring the University part of the course. In addition pictures of principal speakers are to be used in the papers. The University also reported that it was to send out individual letters. Bulletins also are to be prepared to be sent to the hospitals and to the county society secretaries.

The Committee went on record authorizing the purchase of inexpensive paper badges for the course.

# THE JOURNAL

OF THE

## INDIANA STATE MEDICAL ASSOCIATION

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### A CLINICAL CLASSIFICATION OF TUMORS OF THE BREAST<sup>\*†</sup>

E. T. BELL, M.D.

Rochester, Minnesota

In this discussion of tumors of the breast the prominent physical findings in the breast are used as a basis for classification, and the pathological lesions associated with each feature are listed. It is believed that this gives an easier approach to the diagnostic problem than a strictly pathological viewpoint would supply.



E. T. Bell, M.D.

1. A single well-defined mass.
  - a. Adherent
    - Carcinoma
    - Fat necrosis (rarely)
    - Tuberculosis (rarely)
    - Mastitis (rarely)
  - b. Nonadherent
    - Carcinoma
    - Fibroadenoma
    - Cystic disease
    - Sarcoma (rarely)
2. Single ill-defined mass
  - Nonadherent
    - Cystic disease
    - Fibrous mastitis
3. Multiple masses
  - Nonadherent
    - Cystic disease (usually)
    - Mastitis (during lactation)
    - Carcinoma (rarely)
    - Multiple fibroadenoma (rarely)
4. Multiple masses
  - Adherent
    - Carcinoma

5. Paget's disease of the nipple
6. Mastitis
  - In the newborn
  - At puberty
  - During lactation
7. Acute carcinoma of the breast
8. Inverted nipple
9. Discharge from the nipple
  - Bloody
    - With palpable tumor
      - Carcinoma
      - Duct papilloma
    - Without palpable tumor
      - Duct papilloma
      - Ectasia of large ducts
  - Serous
    - With Palpable tumor
      - Carcinoma
      - Duct papilloma
    - Without palpable tumor
      - Ectasia of large ducts
1. a. A single well-defined mass in the breast that is adherent either to the skin or to the deep fascia over the muscle is nearly always a scirrhous carcinoma. Attachment to the skin or fascia is due to the formation in the tumor of fibrous tissue which subsequently contracts. The degree of fixation depends upon the nearness of the tumor to the skin or fascia, its size and its desmoplastic tendency. Small scirrhous carcinomas midway between skin and deep fascia in large breasts are not adherent. In perhaps 5 per cent of cases an adherent tumor proves to be benign: a fat necrosis, tuberculosis or localized mastitis. When the tumor is definitely adherent as described above, a radical operation without preliminary removal and examination of the tumor is often justified.
1. b. A single nonadherent tumor may be a scirrhous carcinoma situated at some distance from the skin or fascia. It may be a medullary or gelatinous carcinoma, since these tumors contain little or no fibrous tissue and do not become fixed until they are very large. Rarely the growth will prove to be a sarcoma.

\* Presented before the general meeting at the Gary session of the Indiana State Medical Association, October 10, 1935.

† From The Department of Pathology, University of Minnesota.

The benign growths are fibroadenoma and cystic disease. Malignant tumors are very rare under the age of 25 years. Between the ages of 25 and 40 years benign tumors are more frequent; but after the age of 50 years malignant tumors predominate. A single nonadherent tumor should always be removed and diagnosed by gross or microscopic study, since over one-half of these are benign and require only the removal of the tumor.

2. A single ill-defined nonadherent mass is nearly always benign. These are usually lobules of the breast that are somewhat enlarged, either because of cystic disease or fibrosis. After repeated pregnancies the involution of the breast may be uneven so that some lobules are larger than others. The mass may sometimes be recognized as an enlarged lobule by its radial position, i. e., its extension from the nipple to the periphery. It is usually unnecessary to remove masses of this type.

3. Multiple nonadherent masses are nearly always benign and are usually due to cystic disease. A few cases will be found to be multiple fibroadenomas, and an occasional case will prove to be an extensive gelatinous or adenocarcinoma which, because of the absence of fibrous tissue, is nonadherent. In women under 25 years of age it is usually unnecessary to do a biopsy, but after that age the most suspicious lump should be removed and examined. If it proves to be cystic disease, no further operation is indicated. Cystic disease is not a precancerous lesion. It is entirely safe to leave lumpy breasts of this type indefinitely. A large number of women who had only one mass removed have been followed for five years and none have developed carcinoma.

In the diagnosis of cystic disease the pathologist should examine sections under low magnification. The adenomatous type of cystic disease resembles adenocarcinoma, but it always has a lobular distribution. It is frequently misdiagnosed as adenocarcinoma or grade 1 carcinoma.

4. Multiple adherent masses are usually due to diffuse carcinomatous infiltration of the breast.

5. Paget's disease of the nipple appears as an intractable dermatitis of the nipple. If the dermatitis fails to respond to treatment a small biopsy should be taken and examined microscopically. The peculiar clear cells in the epidermis establish the diagnosis. In the early stages of Paget's disease there is no palpable tumor in the breast; but the regular operation for carcinoma should be performed since the tumor may form axillary metastases before a tumor is demonstrable in the breast.

6. Mastitis. Mastitis of the newborn may develop in infants of either sex shortly after birth. It appears as a tender swollen area surrounding the nipple uniformly. It requires only protective dressings and is never mistaken for a tumor.

The mastitis of puberty may appear at the onset of puberty in either sex. It is a swollen indurated area, often tender and reddened, of circular form with the nipple in the center. It requires only protective treatment and should never be confused with neoplasm; but occasionally some physician removes the mass.

The mastitis of lactation presents the signs of inflammation and is readily recognized.

7. Acute carcinoma of the breast. This is a well defined clinical type of carcinoma. There is a rapidly-developing diffuse induration and fixation of the breast, often with hyperemia, tenderness and local heat. The patient may also show a slight rise of temperature and a leukocytosis. When the tumor develops independently of pregnancy and lactation a neoplasm may be suspected; but during lactation it is very difficult to distinguish from acute mastitis.

8. Inverted nipple. An inverted nipple may be due to a scirrhoue carcinoma centrally situated in the breast, in which case there is a palpable tumor. It must be emphasized, however, that depressed or inverted nipples are very frequently found in women who do not have cancer. Usually the women will know whether this appearance has always been present or is of recent origin. If only one nipple is inverted a careful examination for a palpable tumor should be made.

9. Discharge from the nipple. When a palpable tumor is present the growth should be removed and examined. It may prove to be a carcinoma or a duct papilloma. If the discharge is bloody and there is no palpable tumor, the breast should be explored. One may find a small duct papilloma or merely ectasia of the large ducts. If the discharge is serous and no tumor is palpable, operation is unnecessary. This condition is due to cystic dilatation of the large ducts. One patient with a serous discharge and no palpable tumor has been under my observation for over six years, and no change in the condition has occurred during this period.

DUES PAID?

This Is the Last JOURNAL You Will

Receive If Your Dues Are

Not Paid

## AN ANATOMICAL ANOMALY OF THE PATELLA MISTAKEN FOR A FRACTURE

H. G. COLE, M.D.

Hammond

Sesamoid bones, in which classification the patella falls, rather commonly develop anomalies. A developmental anomaly of the patella can easily be mistaken for a fracture. As a rule this condition produces no symptoms, is bilateral, and appears on the fibular side in the upper quadrant. The general contour of the patella appears normal, but there seems to be a comminuted fracture present. A longitudinal fissure bisects the outer half of the patella and this outer fragment is divided by a transverse fissure separating the patella into three segments. The outlines of the fragments are smooth, being formed by cortical bone, whereas the margins of recently fractured fragments are serrated. A fracture of the patella in the upper outer quadrant is rare.

### REPORT OF A CASE

A male patient, age thirty-eight, a claim adjuster for one of the large insurance companies, walked into the office complaining of injuries received the previous day when his automobile crashed into a standing train. Examination revealed a large hematoma on the forehead and both knees moderately contused and discolored. Symptomatic treatment was instituted and the patient

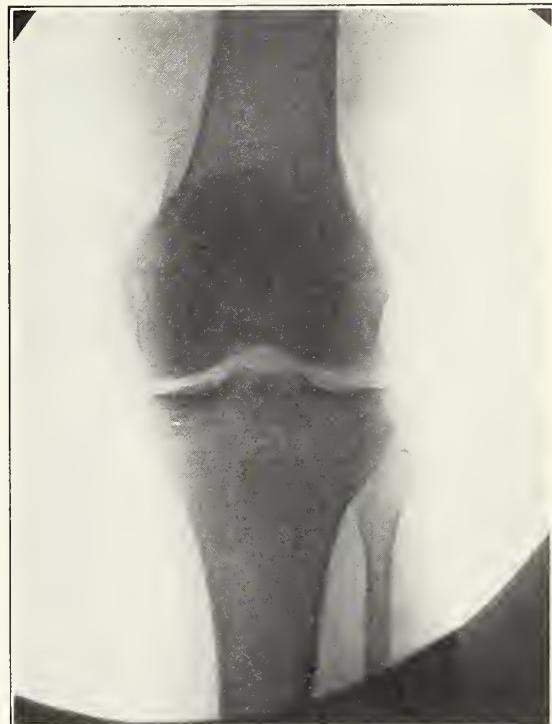


Figure 2. Right. Same condition exists as on opposite side.

remained ambulatory, performing most of his duties.

At the end of two weeks a roentgenogram of the



Figure 1. Left. Upper quadrant on fibular side shows pathology.



Figure 3. Lateral view. No abnormality seen from this angle.

right knee was made and the above described anomaly was found. At first it was mistaken for a fracture, but the lack of substantiating symptoms, physical findings, and disability caused a picture of the other knee to be made, and exactly the same condition existed there, proving the diagnosis of an anomaly.

#### SUMMARY

A mistaken diagnosis of a patellar anomaly for a fracture is easily and no doubt often made. This is the only one I have ever seen. Had there been a fracture, the patient's insurance policies would have paid a specific loss of \$600.

From a medico-legal standpoint, and particularly in compensation cases, recognition of this condition is important. The absence of the usual cardinal physical findings and symptoms such as immediate disability, inability to extend the leg and bear weight, etc., accompanied by a roentgenogram of both knees, is the means of making a differential diagnosis, although occasionally, as the literature shows, the anomaly exists only on one side.

Adams and Leonard,<sup>1</sup> in a series of sixty-three patellar fractures, reported three cases in which a diagnosis of fracture was made in error. These anomalies are always vertical, except one horizontal case reported by Petty, Buenos Aires.<sup>2</sup>

5231 HOHMAN AVENUE.

<sup>1</sup> Adams and Leonard: *Surg., Gyn., and Obst.* 4:601, 1925.

<sup>2</sup> Petty: *British Jour. Surg.* April, 1925.

#### ABSTRACT

##### IS ANESTHESIA BEING NEGLECTED IN THE MEDICAL CURRICULUM?

A. L. SCHWARTZ, Cincinnati (*Journal A. M. A.*, April 25, 1936), made a survey of the medical colleges of the United States in an effort to determine the hours of instruction, both theoretical and practical, given medical students during their four years of work. It was felt that such information might be enlightening in its relation to the controversy of nurse versus professional anesthesia. In analyzing this survey it is obvious that despite the inclusion of lectures in anesthesia to the students, there is a wide variation in the amount of time devoted, with an average of about ten hours given to the entire subject of anesthesia. Furthermore, it is inconceivable that in five medical colleges there is no instruction in anesthesia. With regard to practical demonstration, the extremes are even more marked. Again it is inconceivable that anesthesia is entirely neglected or given only a meager amount of time in the medical curriculum. In only ten of the colleges that replied are there departments of anesthesia as a distinct and separate unit. To the author, this survey indicates a deplorable inadequacy of training in anesthesia for the medical students. In addition to the inadequacy of training in the medical schools, the facilities for postgraduate training are limited. In a recent issue of *The Journal*, the number of hospitals approved for residency in anesthesia numbered six. The total number of approved residencies numbered eight. Such a small number certainly indicates either a lack of interest in anesthesia or a disregard by the medical profession of the importance of training in anesthesia. It is hoped that this survey may be instrumental in stimulating a renaissance of the instruction in anesthesia in colleges and hospitals.

#### SOME OBSTETRICAL APHORISMS\*

C. O. McCORMICK, M.D.

Indianapolis

##### 1. Every female child is a potential mother.

We will not enjoy the obstetrical millennium until this ulterior (but not impossible) consideration is extended every female child not only by the family physician, the public health officer, and the parents, but by every civic-minded layman.

Protection against nutritional diseases affecting osseous growth, and those current diseases of childhood, not infrequently affecting future cardiac and renal functions. Provision for an athletic life. Having a baby is a physical feat, and college diplomas often hinder the ease of the process. Pre-marriage examination. Economic conditions permitting early marriage and early childbearing—nearer twenty than thirty years of age.

##### 2. Woman's most important biological function is reproduction.

We physicians are directly entrusted to assist her in guarding and conducting this function. Our responsibility is uniquely important, and we commit ourselves when we endorse and submit the following:

- a. If she chooses to bear a child, in doing so she should not be obliged to forfeit her life, or assume permanent disability therefrom.
- b. If occasionally it is unavoidable that her life be terminated, because of parturition, society (medical profession and lay public) is morally obligated to minimize to its utmost the frequency of such an occurrence.
- c. If the mother is of good health, the infant normally developed, and there are no accidents of pregnancy, her child should be born alive and healthy.

We further realize that each maternal death retards community progress, and the gross accumulative effect detracts from a strong national welfare.

Most delinquency exists among motherless children. A large per cent of penal institutional inmates never knew their mothers.

##### 3. Any group of deaths in which fully two-thirds of the total number could have been prevented becomes immediately a most pressing problem.

We of the medical profession should feel this responsibility most keenly in that we, because of our lack of skill and judgment, and careless attention, are held directly accountable for over 60 per cent of these preventable deaths. This knowledge should stimulate extra competence.

Because of its failure to take full advantage of available obstetrical facilities during pregnancy and labor, the lay public is directly responsible

\* Presented before Post-graduate Course, Indiana University School of Medicine, April, 1936.

for over one-third of all avoidable maternal deaths.

The problem of maternal mortality is solely one of education, and the challenge is wholly up to the medical profession. It may be needless to add that maternal mortality will continue high until every father and mother understands what constitutes competent prenatal, delivery and post-partum care, and then demand it.

Competent physicians cooperating with an intelligent public can reduce maternal mortality to a degree of mere rarity.

Chronic debilitated, nephritic, cardiac, pulmonary, and diabetic women should not be expected, and in many instances not permitted, to withstand the strain of childbirth. Not only much immediate and ultimate maternal loss arises from this group, but much aggravated morbidity.

*4. In that 50 per cent of originally conceived individuals do not survive pregnancy, labor, and the first year, it may be stated very adroitly that "Life begins at one year."*

From 30 to 35 per cent of fetal loss occurs before the seventh month of gestation, and 15 to 20 per cent are born dead or die during the first year.

*5. Some day, perhaps in the near future, a son of Sir Lancelot will come forth and crusade in behalf of the unborn.*

Too many babies are lost because of prematurity, incompetent interference, unrecognized disproportion, breech presentation, toxemia, and vaginal delivery in placenta previa.

In dealing with the latter condition we no longer should routinely consider the baby a by-product.

*6. Competent prenatal care is more important than competent delivery care.*

Most mortality from placenta previa, eclampsia, and disproportion, and much of that from infection, is eliminated by competent prenatal supervision. Infant mortality is likewise reduced—less miscarriages, prematurity and stillbirths, and more vigorous newly borns.

*7. If one were to cast away all prenatal examination equipment, including pelvimeters and chemicals for urinary examination, save one article, that one would be the blood pressure apparatus.*

Blood pressure is a more important guide in toxemia than the urinary findings. A persisting diastolic of 100 m.m. or more is frequently more significant than a markedly elevated systolic.

In dealing with a case of pregnancy or labor complicated by endocarditis, the blood pressure is more helpful than the character or number of murmurs.

Many a case of myocarditis is first recognized by noting a low diastolic pressure, and the conduct of the pregnancy or labor is based upon that finding. In such an instance, better obstetrics often assists by forceps delivery as soon as the cervix is fully dilated, thus avoiding the cardiac strain of second stage labor.

*8. Outlet pelvimetry, although usually disregarded, is more important than inlet pelvimetry.*

Most obstetrics is performed at the outlet.

It is at the outlet that:

1. Most labors are arrested.
2. Over 90 per cent of forceps operations are indicated.
3. Most of the permanent and fatal injuries to the infant occur.
4. Mother suffers practically all immediate birth injuries (lacerations, episiotomy, rupture of the symphysis, fracture of coccyx), and incurs most of her permanent trauma (relaxed perineum, weakened rectal and bladder sphincters, rectocele, cystocele, uterine prolapse, etc.).

Inlet measurements are indirect, inaccurate, and chiefly used to classify the pelvis. Those of the outlet are direct, accessible and quite accurate.

After all, the baby's head is the only real pelvimeter. It can be applied readily to the inlet either manually or by test of labor, but not to the outlet until late in labor, which may be too late if the outlet proves small.

The attendant who does not attempt to measure the transverse diameter of the outlet by at least passing his fist between the ischial tuberosities is not overburdened by competency.

*9. A breech presentation is a pathological presentation.*

Why?

1. Infant mortality 15 to 20 per cent. (Cephalic 3 per cent.)
2. Greatly increased infant morbidity.
3. Maternal morbidity decidedly greater.

Then, too, the proper set-up for breech delivery calls for an able assistant, surgical anesthesia, and a pair of forceps.

Also, breech is often associated with such abnormalities as:

1. Contracted pelvis.
2. Tumors.
3. Low placenta.
4. Polyhydramnios.
5. Hydrocephalus.
6. Twin pregnancy.

Good obstetrics dictates external version—following the eighth month, repeated if necessary. Primiparae usually require anesthesia—ether, not gas.

*10. Painless, causeless, re-occurring bleeding in the last trimester is a red flag, and "spells" placenta previa until proved otherwise.*

Do not further jeopardize the patient by doing either a vaginal examination or a vaginal packing in the home.

Hospitalize at once. Take donors along. If not competent to meet all possible eventualities, call a consultant. Placenta previa is a serious complication. Obstetrics is frequently a two-man job.

If thou hast grown impatient with thy graying, do an accouchement force, or attempt delivery

through an incompletely dilated cervix in the presence of placenta previa: Hemorrhage! Uterine rupture!! Denise!!!

11. *Forty ounces of urine a day keeps convulsions away.*

Importance of normal kidney function assisted by free fluids.

12. *Act before the "explosion," and have mother home for Christmas.*

A systolic pressure of 140-150, or a diastolic of over 100, in a patient carrying previously normal pressure, demands hospitalization at once, regardless of urinary findings. Do not tarry until pressure is 175-200. (Blood pressure should be taken monthly up to the seventh month, bi-weekly during the seventh and eighth months, and weekly during the ninth month—oftener if indicated.)

If condition progresses despite bedrest and appropriate measures, then the gestation should be terminated. This routine eliminates 99 per cent of all eclamptic deaths.

The mortality of radical treatment for eclampsia is four times that of conservative therapy.

13. *Every primiparous labor case is a possible Cesarean.*

Therefore, careful mensuration, limited rectal examinations, no vaginal examinations (unless imperative—then most aseptic), and preserved membranes.

Cesarean mortality rises directly with each hour the membranes are ruptured—even in the absence of vaginal examinations.

Over 95 per cent of labor cases can be conducted successfully without vaginal examinations, employing instead proficient palpation and auscultation, assisted by an occasional rectal examination.

14. *Barring disproportion, "Once a Cesarean always a Cesarean" is an exaggeration.*

Depends on thoroughness of repair and healing of previous uterine scar. Also, on type of section—low cervical safer than classical. It has been shown that one-third of cases free from disproportion can be delivered safely from below.

Always hospitalize, and deliver as soon as cervix is fully dilated.

15. *Pituitrin is our most powerful oxytocic drug, and in the hands of a fool its effect may be most fiendish.*

The criminal code does not yet include the penalty for administering pituitrin to a woman in labor having had a previous section. (It is here that the Golden Rule is most fitting.) The rating is scarcely higher for him who applies the drug during the first and second stages of labor, either knowingly or unknowingly, in the face of disproportion or mal-presentation.

Pituitrin has but one real undisputed obstetrical use, namely, its application in the third stage.

16. *In performing a craniotomy upon a living baby, the accoucheur becomes judge, jury, and executioner. Upon the second craniotomy he achieves the added character of criminal.*

A baby's life is an unsatisfactory pelvimeter.

Fortunately, with the perfection of the cervical and extra-peritoneal cesareans, craniotomy on the living child is very rarely indicated. On the other hand, if the baby is dead it is generally indicated to spare the mother unnecessary trauma.

17. a. *When in doubt, sit tight.*

This applies particularly to moderately contracted pelvis cases, occiput posteriors, and breeches.

Supply fluids and glucose by vein if necessary. Observe maternal pulse and temperature, and fetal heart. Of course, supply analgesia.

b. *When certain of placenta previa, prolapsed cord, or transverse lie, do not sit at all.*

There is no expectancy treatment for these conditions.

18. *Let diligent anticipation precede alarming surprise in meeting postpartum hemorrhage following placenta previa, hydramnios, twins, and exhaustive labor.*

The complication occurs frequently enough in these cases always to warrant preparedness.

19. *Guide the baby beside the rectum rather than through it. Otherwise your mental balm flies out the window (or falls into the pail).*

Outlet pelvimetry! Mesio-lateral episiotomy.

One of the most important obstetrical goals is to leave the rectal sphincter intact.

20. *Of all branches of medicine, obstetrics at the top is most sublime; at the bottom, the most lowly. (Hence our 60 per cent of preventable maternal deaths.)*

504 MEDICAL ARTS BUILDING

## THE RELATION OF SINUSITIS TO ARTHRITIS\*

J. JEROME LITTELL, M.D.

Indianapolis

During the past fifteen years I have developed an interest, as a rhinologist, in the relation of sinusitis to arthritis, and in the possibility of improving the arthritic state by attention directed to the former. It is not within our province to enter into the controversy that exists as to the various etiologic factors that obtain in chronic arthritis. Suffice it to say that at the last meeting of the American Committee for the Control of Rheumatism in Cleveland, Hench of Rochester, Holbrook, and others state the majority opinion that the most important cause of the rheumatoid type is infection.

There is a difference of opinion also as to whether or not sinusitis may serve as an infective

\* Presented before the Indianapolis Medical Society, May 7, 1935.

focus (Mullin<sup>1</sup>), and if so, can it be sufficiently eradicated to improve the systemic state (Solis Cohen<sup>2</sup>). Snyder reports most favorable results in the treatment of ninety-three cases of arthritis showing clinical and roentgenologic evidence of sinusitis. We all develop our own convictions upon a problem from our individual observations and results. My own impressions covering a comparatively small series of cases are that: (1) sinusitis may and often does serve as a most important and frequently unrecognized focus in the cause of rheumatoid arthritis; (2) the systemic disease may often be markedly alleviated or entirely arrested by its proper care; and (3) the area involved in these cases is usually the ethmoid.

Sinusitis of some degree is common in temperate climates. Our chief interest in it as a source of systemic disease is less in the amount of sinusitis than it is in the degree of absorption therefrom. Since we have approached it in this way, we have had much less disappointment in the care of it. Absorption takes place largely from the ethmoid-sphenoid region. I recall a few cases that have shown systemic improvement following treatment of chronic maxillary sinusitis. Our greatest benefits, however, have accrued from attention to the upper sinuses.

Of twenty cases of arthritis cared for in the last few years, we have had only two serious disappointments—cases where we felt the chance for systemic improvement was present and we got none. In one of these antral hyperplasia alone was removed. The patient showed no improvement and progressed unfavorably. The second, a severe case with fever, has now cleared up, but only after a stormy three years in Arizona. Our tendency is to credit the climatic change and general care there rather than our efforts in her recovery. Three have shown only slight improvement. The remainder have improved from approximately 75 to 100 per cent.

I should like to report specifically three particularly troublesome cases which seem to represent successful examples of this group:

1. Mrs. H., age thirty-five, had generalized joint pain and soreness, mostly of the large joints, of one year standing. In spite of all efforts, including a winter in Florida, the condition became more and more crippling, so that she became unable to work. Her occupation required some standing. Nasal symptoms were limited to a stuffy nose at night and a tiring of the eyes after use—a condition which glasses did not correct. Nasal treatment was insufficient, so that surgical attention to the ethmoid region was found necessary. Her joint pains began to improve almost at once, and within two months were entirely gone not to return. In the three years that have since elapsed,

her health has been perfectly normal, and the eye symptoms and nasal disturbance are gone.

2. Mr. W. C., a well-built young man and a Princeton student, came into the office on a cane. He had alternated between the use of the cane and crutches for two years because of arthritis, largely limited to the sacro-iliac joints. He had been forced to give up wrestling in which he was interested. The onset had been associated with an attack of flu. Since then he had noticed a catarrhal dropping in his throat, but no other obvious nasal disturbance. The nasal films showed a polypoid condition of the membrane of the right maxillary sinus and ethmoidal infection with blockade. Surgical correction brought about a spectacular relief from his pain. He was seen ten days later, when he announced that he could go down to the floor on one leg and come up again—something he had been unable to do since the onset of the condition. The sequel is interesting. On two occasions he reported that he had a return of the pain

Fig. 1

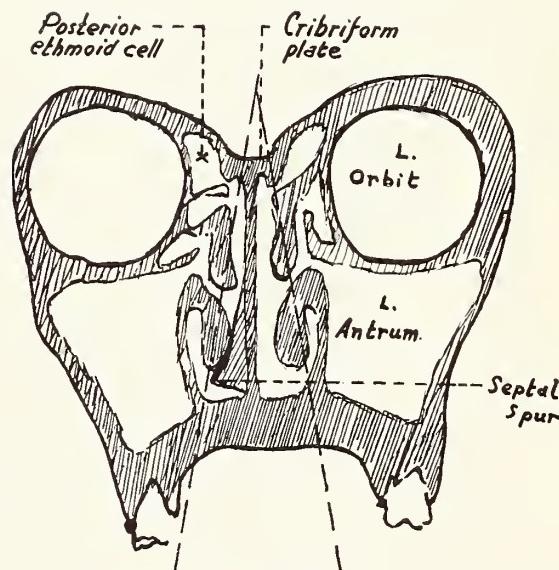


Figure 1 shows a frontal section of a head, drawn diagrammatically, at the level of the ostium of the maxillary sinuses. We note the triangular shape of the nasal cavity, narrow apex at the top. We find all the sinus ossea in the upper and increasingly more narrow half. The drainage area for the posterior ethmoid region in a good nose is very scant. As Fenton<sup>3</sup> has shown, man pays a penalty, in the narrowness of this region, for binocular vision. The position of the eyes in the front of the head has crowded the nasal chambers between them. The nose shown in this section is essentially normal and mechanically good. We see a low anterior spur or ridge formed by bony over-development at the junction of the perpendicular plate of the ethmoid and the vomer. Deformities such as this rarely produce symptoms unless they are very extreme or unless they extend posteriorly to block the posterior sinus regions. Surgery is not indicated here, then, and will not be appreciated unless this posterior blockade exists.

<sup>1</sup> Mullin—*New England Journal of Medicine*, 212:50, January 10, 1935.

<sup>2</sup> Solis Cohen—*Annals Otol. Rhinol. Laryn.* 43:586 June, 1935.

<sup>3</sup> Fenton, Ralph A.: Modern Views About Nasal Infection. *J. Ind. St. Med. Assoc.*, Vol. 28, No. 1 (Jan.) 1935, p. 12.

for a few hours after granulations in the ethmoid region were treated during the healing process. Four months later he returned from school with a cold, a maxillary sinusitis, and slight soreness in his knees. These cleared up soon, and he has had no trace of trouble for two years.

3. A third case, Dr. X., had suffered with back pain with spondylitis for three years, getting progressively worse so that he found great difficulty in leaning over an operating table. He had been thoroughly examined at various important centers for possible sources of trouble with a negative result. A submucous and ethmoidectomy were done a little less than a year ago, following which the back pain began to improve. He treats it with

*Section posterior  
to maxillary ostium*

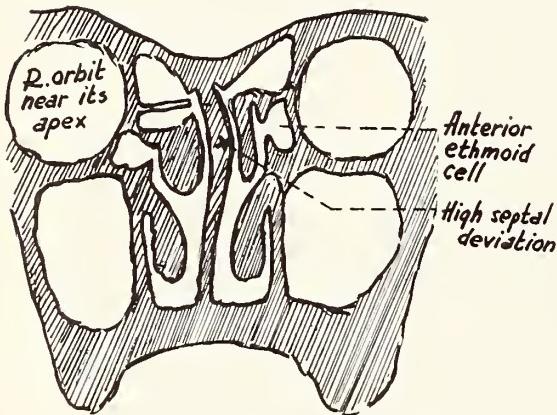


Fig. 11.

Figure 2 demonstrates a more posterior section. This septal deformity may seem at first glance less extreme than in the first section. It has, however, a very significant difference. It does not simply block the air passages of the nose, but rather of the sinus openings themselves. The mechanical features of this nose show great potentialities for the development of chronic sinusitis. In perfect health and in the absence of a severe type of infecting agent, it will operate normally. While space in the region of the sinus openings in the pointed apex of the triangle of the nasal chambers is at a premium, it is present. There is no space, however, for swelling to take place safely. A severe infection in this region causes approximation of the parts from engorgement of the cavernous tissues found here. The acute infection is prolonged by the operation of a vicious circle—the more blockade, the more the infection is aggravated. Natural resistance gradually reduces the activity of the condition, but unless these cases are carefully supervised, a chronic infection ensues—due entirely to the mechanical difficulty in the affected region. Air which is supposed to enter and leave a sinus with every respiratory effort is prevented from doing so. Muco-pus, the end products of the infection, are retained in the sinuses through inability to obtain proper egress. Absorption takes place through the blood stream and lymphatics (as witness the palpable cervical glands on the affected side in the more active cases), and we find ourselves with an highly active source of systemic disease. This may include a wide variety of disorders—from disturbances of the various organs of the body to painful inflammatory conditions of the skeletal framework—arthritis, neuritis, myositis. The myositis of the trapezius muscle from ethmoiditis is well known, and described by Osler. Our discussion here, however, will be limited to the subject of the more serious and crippling arthritis.

respect yet, but the pain is gone. I saw him one month ago with sore knees accompanying an acute suppuration of his right antrum, but after two washings both cleared up. A report from him during his second postoperative year is excellent (April, 1936).

#### DIAGNOSIS

The diagnosis of a sinusitis capable of producing these lesions is often not easy. The history is sometimes helpful with the onset of the rheumatic condition associated with an acute, persistent rhinological disturbance. In the majority, however, the onset is more insidious and without any obvious nasal symptoms whatever. Headache is usually absent. X-rays have been less helpful in the diagnosis of ethmoid activity than in the discovery of the less important maxillary sinus disease. Careful, repeated intranasal observation is the only diagnostic method upon which I feel that I can depend. An ethmoid region which is repeatedly swollen and congested over a period of time with a tendency to stuffiness of that side of the nose (and of this the patient is usually unaware) is actively infected. It is rare to find free pus here.

#### TREATMENT

The method of treatment is usually surgical. Correction of the original mechanical cause for the chronicity of the infection is not sufficient and must be accompanied by the removal of all infected tissue surgically accessible. This surgery is safe, effective, and permanent. Failure to do this amply serves as the basis for Solis Cohen's statement that surgery of these infective foci does not eradicate focus. He feels that the nasopharynx is active in this regard. My experience justifies the feeling that this flat surface does not harbor infection and that its difficulties are due almost entirely to a sinus membrane which never recovers after being long infected, depositing its irritating discharges by ciliary activity over the pharyngeal surface.

This is a subject which must be approached with an open mind. We are aware of the many factors operating in this distressing disease. But if we can occasionally pick up and eradicate safely what we feel is often the greatest, if not the sole, cause of a chronic arthritis, we are frequently rewarded by bringing about the alleviation, if not the complete arrest of a very gloomy outlook for the patient.

#### SUMMARY

1. Sinusitis may serve as a source of infection in rheumatoid arthritis.
2. Systemic absorption takes place largely from the ethmoid for mechanical reasons.
3. The diagnosis is often not easy and requires careful repeated rhinological examination, as most cases are of the so-called silent type.
4. Gratifying results follow the adequate care of these cases.

## PATHOLOGY OF THE TYMPANIC MEMBRANE\*

B. D. RAVDIN, M.D.

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Deaver in his *Surgical Anatomy* describes the tympanic membrane as follows: "The tympanic membrane is an elliptical membranous disc attached to a grooved ridge of bone at the bottom of the external auditory meatus. Its greatest diameter measured from its posterior-superior portion forward and downward is approximately 10 millimeters (2/5 of an inch) in length. The vertical measurements are slightly less; it is 1/10 of a millimeter or 1/240th of an inch in thickness. The membrane is situated obliquely, its lateral surface being directed lateralward, downward, and forward. It is directed downward and lateralward at an angle of about 55 degrees and forward and lateralward at an angle of about 10 degrees. In the infants at birth, this obliquity is greater and the membrane is almost horizontal. Its lateral surface is concave, the center being the deepest point of the concavity, for the extremity of the handle of the malleus is here attached, and, as it were, draws the membrane medially. The depressed center is known as the umbo. The bony ring, the annulus, to which the tympanic membrane is attached, is incomplete above, leaving a notch, the notch of reeves (tympanic notch), which is filled in by a thinner and looser portion of membrane known as the pars flaccida or Shrapnell's membrane. The circumference of the membrane which is fixed in the tympanic sulcus is thickened and is called the fibro cartilaginous ring. The drum consists of three layers—a lateral cuticular layer; an intermediate fibrous stratum or membrane propria, consisting of circular and radiating fibers, and a medial mucous membrane."

The normal otoscopic picture during life for the tympanic membrane, shows it to be tinged gray, or grayish blue (pearl gray). It appears smooth and polished. Extending downward and forward with its apex at the umbo is a cone of light, which is of value in the diagnosis of disease of the tympanum and the tympanic membrane. The handle of the malleus and its short process and, posterior to the handle of the malleus, the long process of the incus, the promontory and the recess of the cochlear window can frequently be seen through the membrane as shadows. If other parts of the tympanic contents become transparent, such as the stapes, chorda tympani, stapedius muscle, folds of the malleus, etc., it is a sign of pathologically increased translucency of the tympanic membrane due to atrophy. From the short process of the malleus, two folds extend to the margins of

the tympanic notch. These are known as the anterior and posterior folds of membrane and between them is Shrapnell's membrane. The remainder and major portion of the drum is known as the pars tensa.

Only the smallest number of diseases and conditions of the drum membrane are confined exclusively to this membrane. A large number constitute either part of diseases and conditions of the external meatus, while a still larger number represent and are associated with diseases of the drum cavity and its adnexa, which is accessible to our eye.

Traumatic rupture of the tympanic membrane, whether due to direct or indirect violence, produces the following otoscopic findings:

In fresh cases there is either a slit-like radial, or irregular fissure in the tympanic membrane. The edges of the rupture are often irregular, fringed, or there is an angular tear with the flap folded upon the tympanic cavity. The edges are tinged with blood while the rest of the mucous membrane is either unchanged or infiltrated with punctiform hemorrhages. Rupture of the two anterior quadrants is more frequent than those of the two posterior ones. In ruptures occurring on the otoscopic level of the stapes, window of the labyrinth, chorda tympani, etc., these parts will, of course, be seen through the rupture and present characteristic optical displacement when the examiner moves his head, as is observed in parallactic displacement of the eye.

### INFLAMMATORY INFECTIONS OF THE TYMPANIC MEMBRANE

Acute myringitis always shows, on otoscopic examination, acute hyperemia, sometimes also swelling and edema with the formation of cysts of the lateral surfaces. In some cases the membrane appears unchanged with the exception of a radial vascular injection; in others there is a diffuse hyperemia; the line of the manubrium is either blurred or quite invisible due to edema. The cysts, if visible, are small and thin-walled varying in size from a millet seed to a small pea. They contain serum which is either lumped or blood tinged; if purulent, which is rarely the case, they are yellow and opaque. With yellow and clear serum, the otoscopic picture resembles in color and lustre that of secretory catarrh of the middle ear.

Subacute and chronic inflammations of the tympanic membrane present otoscopically a dull, gray-red retracted tympanic membrane of childhood which is almost pathognomonic for the presence of adenoids. These findings are not always constant, since temporary improvements frequently occur and the picture of the drum at this time may show a perfectly normal appearance.

Catarrhal affections of the middle ear, especially where there is considerable exudation, are classified under the term exudative middle ear catarrh. In acute catarrh of the tube, seen following colds and

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most frequent in children, the otoscopic findings show no changes save a retraction of the tympanic membrane. In acute or subacute catarrh of the middle ear, also called secretory middle ear catarrh, the otoscopic examination shows normal or slight retraction of the tympanic membrane. The lustre of the membrane is increased, the light reflex is more intense, giving the impression that the membrane is varnished, the yellow exudate imparting its color to the membrane. If the whole meso-tympanum is filled with exudate, the whole of the tympanic membrane is tinged yellow.

When there is any residue of air in the tympanic cavity, the lower or yellow part of the membrane is sharply demarcated against the gray upper part through the meniscus formed by the fluid. This line of demarcation closely resembles a hair in the otoscopic picture and is always distinctly visible. Changing the position of the head also causes changes in the line of demarcation. This line is in many cases more or less straight; in others it is simply curved or undulated. It extends over the entire width of the membrane, or as the exudate increases, it is confined to the anterior or posterior half of the membrane. The increased lustre of the tympanic membrane is occasioned by osmosis and from the same cause the manubrium appears thin and narrow. Doubtful cases should always be examined with daylight as the yellow or yellowish brown coloration of the tympanic membrane is then very distinct.

Chronic tubal catarrh is a rather rare condition. The otoscopic examination shows considerable retraction of the otherwise unchanged tympanic membrane. The short process and the posterior tympanic fold protrude considerably; Shrapnell's membrane is much retracted. The otoscopic picture sometimes stimulates perforation of Shrapnell's membrane and it must be left for the examination with the Siegle speculum to demonstrate the condition of the highly retracted membrane.

Chronic catarrh of the middle ear, a very common condition, shows otoscopically grave manifestations of the tympanic membrane and the mucosal folds of the tympanic cavity, the result being circumscribed or diffuse atrophy, considerable retraction of the tympanic membrane and bulging of the posterior fold of the membrane. The retraction may become so considerable that in the otoscopic picture the manubrium appears to be behind the tympanic fold and is, therefore, invisible.

Chronic exudative middle ear catarrh shows rather characteristic findings of the tympanic membrane. All the signs of chronic catarrh are present as a rule: retraction, protrusion of the posterior fold, striated or cloudy turbidity, cicatrization, atrophy, etc. To these signs are added the diagnostic symptoms of the tympanic exudate, increased lustre of the tympanic membrane, narrow line of the manubrium, the characteristic yel-

low color, emanating from the exudate, at places where the tympanic membrane has retained its normal transparency, or because of atrophy, is more transparent than usual. In the presence of widespread atrophy, the various parts are sharply separated by protruding crests; each atrophied place is considerably retracted, injected, and has punctiform light reflexes.

Chronic adhesive catarrh comprises all those afflictions which represent the termination of catarrhal or purulent affections of the middle ear in which the exudate has been gradually organized by connective tissue formation. If the use of the Siegle speculum shows a reduced or inhibited mobility of the tympanic membrane, the possibility of a chronic adhesive process should be given weight. There are cases of chronic adhesive catarrh where we have definite mobility of the membrane and even increased mobility due to atrophic conditions; however, here we usually find a fixed malleus which plays no part in the movements of the tympanic membrane.

In simple acute otitis media there are several degrees and forms of swelling and injection of the tympanic cavity as revealed by the otoscopic examination. The membrane may be fleshy and thick, completely hiding the line of the manubrium, with diffuse hyperemia of the entire membrane. In other cases, the tympanic membrane is only slightly swollen or merely dull and without lustre. In some of these cases there is radial vascular injection. The circular injection of the peripheral margin is of pathognomonic value.

In acute purulent inflammation of the middle ear, or acute suppurative otitis media, the otoscopic findings show a more or less pronounced edema and hyperemia, which may be uniformly diffused over the entire tympanic membrane. In other cases the membrane is more inflamed and swollen in some places than others, where hyperemia, edema and protrusion are very pronounced. Extensive vesicle formation is not rare. In the middle ear suppuration of the epitympanic variety the inflammatory manifestations are limited to the upper part of the tympanic membrane in Shrapnell's membrane and the postero-superior quadrant.

The drum may be intensely red in color, the line of the manubrium is entirely hidden by swelling. On the other hand, the drum may be pale, red, even in the presence of considerable pus in the middle ear, or there may be only a radial and peripheral vascular injection. Generally speaking, the intensity of the reddening and swelling of the tympanic membrane decreases but little with the progressive purulent transformation of the exudate. If no perforation takes place and the acute inflammation leads to empyema of the tympanic cavity, the membrane may be opaque, grayish yellow with but slight injection of the radial vessels. Imminent perforation is usually indicated by a circumscribed yellow discoloration and considerable bulging of the membrane. After perforation there

is, as a rule, a visible more or less circular gap or fissure, the swollen margins of which lie close together. Often the perforation is not visible even when the pus is wiped away. Use of the Siegle speculum frequently localizes the opening.

#### CHRONIC MIDDLE EAR SUPPURATION

Here the otoscopic picture is typical of perforations located in various parts of the membrane. The perforations may be single or multiple, large or small, central or marginal, they may be smooth and regular or present the most variegated configurations. In some cases the manubrium is intact, while in others it may be destroyed with large portions of the membrane.

Lime deposits of varying extents can often be observed. Single or multiple polyps may be present.

24 N. W. FOURTH ST.

#### DISCUSSION

C. H. McCASKEY, M.D. (Indianapolis): The subject which Dr. Ravdin has presented could well be called gross pathology of the membrana tympani. He has taken up rather exhaustively the grosser appearances of the drum membrane in disease. He has discussed the whole thing in a very regular manner. I would venture to say that if we could look at a number of drums and then be asked to describe them, we would describe them in many different ways. This must be taken into consideration in the description of the gross appearance of the drum membrane.

I wish to say something about the color of the membrana tympani which should always be taken into consideration. In its upper portion it is always more injected, or appears to be more injected, than the lower part where it normally has a grayish color. I have always been prone to check the drum membrane against the matrix of my finger nail, which is about the color of a normal drum membrane.

A few words about the acute conditions and the types of perforations which occur. We should think of the histology of the membrane; you will find it made up of mucous membrane on the internal surface, cutaneous membrane externally, and a layer of connective tissue which radiates in two directions between these two membranes. In one direction you have circular fibers, and, in the other, transverse fibers. The interspaces formed by these fibers are equidistant from the periphery to the handle of the malleus. That is the reason we see a greater number of perforations in the posterior inferior quadrant of the drum membrane.

One of Dr. Ravdin's slides showed the dimpling or papule beginning of a perforation in acute suppurative otitis. In this part of the area, the meshes of connective tissue, perhaps, are further apart than in other portions of the drum. This

condition is also found in the anterior inferior quadrant of the membrana tympani.

The changes in the cone of light—which is a high light, are found in the gross appearance of the drum membrane. You may find it absent or practically absent. You may be confronted with the idea that perhaps this is an indication that we have a disease condition in the drum membrane itself—it is not due to that at all. It may be so changed that you get no reflection. These reflections may be distorted in different shapes over the lower portions of the drums. There may be cupping due to indrawing or retraction of the drum membrane, and you will have cupped high lights or light reflexes indicating that you have had pathology.

Just a word about multiple perforations of the drum membrane. Whenever you are confronted with multiple perforations of the drum, especially in people who give a history of having been associated with tuberculous people, it is well to keep in mind that you may have a tuberculous infection in that ear.

I have had the privilege of seeing only two cases of tuberculosis of the middle ear in which we were able to make an early diagnosis through the type of perforation. In these cases the connective tissue will shine like so many threads.

Don't try to interpret a dirty membrana tympani, so to speak; clean the field out, and get a good look at it. I would much rather see a drum membrane with a head mirror and reflected light before I use an otoscope, because that gives a more or less normal appearance; later, magnify to suit yourself.

Primary infections of the drum membrane are not many—dermatitis, in some form, and you may have blebs and papules that you see in influenza. You also may have herpes of the canal.

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## PARANOID DEVIATION

### ITS CAUSES AND DEVELOPMENT

HAROLD S. HULBERT, M.D.\*

Chicago

The paranoid state of mind in adults usually is clearly recognizable at the age of thirty-three. It may be defined as "of himself, excusatory; of others, accusatory" when things go wrong.

#### ETIOLOGY

The functional conditions known as paranoid deviation may have an organic basis in some cases, such as arterio-sclerotic paranoid state, paranoid imbecility or mental defect after birth injury, or paranoid post-traumatic mental deviation.

In hereditary paranoid psychosis, the number of brain cells is incommensurable, of course, but if there are associated other inferiorities, i. e., hypoplasia and hypofunction of other tissues (short skeleton or diminished libido), it may be assumed that there is generalized hypoplasia including hypoplasia of the brain and insufficiency of parenchymal brain cells.

Paranoid attitude also may occur in a congenital inferior of a good family strain. The most classic example of this is in the unfortunate twin, the runt. It may safely be assumed that in such a case at birth there is hypoplasia or insufficiency in the brain tissues as well as in the skeletal and other tissues of the body. After birth, no more brain cells are made. Other obvious cases of congenital inferiority with later paranoid mental state are (a) unsuccessful abortion, (b) some cases of premature birth, (c) toxemia during pregnancy, (d) unusually severe vomiting during pregnancy, and (e) a child conceived rather soon after a previous full term or part term (miscarriage) pregnancy. In our clinical studies of problem children, we have not found any correlation between injury to the head at birth, forceps injury, birth hemorrhage, etc., and subsequent paranoid attitude, although logically there should be some high correlation.

Often there are in the same individual both hereditary and congenital contributing factors: poor stock and maternal malnutrition, such as pernicious vomiting, exhaustion, uremia or other poisoning, or pneumonia during pregnancy. Rarely but sometimes paternal alcoholism, either chronic or acute, within a few days or very few weeks prior to conception, or paternal exhaustion from a toxic condition like the prostration following severe influenza, may be the decisive contributing factor. There are instances where the implantation of spermatic fluid once but too long before ovulation, such as may happen in rape or in

unsuccessful efforts at birth control, may lead to general or systemic structural inferiority in the on-coming child. In the cases of some paranoid children studied, there was such a prior history. Monstrosities from unsuccessful attempts at abortion usually are thoroughly inferior, and some have been found to be paranoid. There is little to be said in favor of unsuccessful birth control. A raped woman should have prompt dilatation and curettage.

Paranoid mental state may develop in the well-born of good inheritance if at any time in life there is destruction of brain tissue with consequent insufficiency of brain cells. The paranoid deterioration of some cases of alcoholic dementia is caused by brain atrophy from chronic alcoholism; here the paranoid delusions, probably based on impotency, are delusions of infidelity. This condition is progressive even if or after drinking ceases. The poor, abused, faithful wife, who has put up with the husband's drinking and misconduct, may have become optimistic when his gastritis caused him finally to quit drinking "by will power," only to have her hopes dashed and her heart again crushed by his turning on her for her (alleged) misconduct. No man younger than fifty-four can admit that he is impotent and at the same time retain a normal outlook: if his judgment has been rendered insane he says to himself first, and later to his wife, "She does not arouse me as she used to . . . Maybe she is giving her favors to someone else . . . I'll watch for signs." Thus begins the paranoid coloring of his alcoholic dementia.

Other causes of paranoid mental state in heretofore normal, healthy people are some cases of skull fracture with brain atrophy, some cases of apoplexy and hemiplegia, some cases of cerebral arterio-sclerosis, especially if they have had typhoid or tropical fevers or have lived a too strenuous or arduous life such as that of military men who have been in several campaigns, and many cases of senility with senile dementia from senile atrophy of the brain. Brain tumor in any age of life may, though rarely does, cause paranoid deviation. The delirium following head injury is more severe than toxic delirium, and if especially severe may be the forerunner of traumatic mental enfeeblement. Some of these cases become paranoid, and are called traumatic paranoid dementia. However, most cases of severe head injuries clear up without any mental sequelæ, but if there occurs subsequently another severe head injury with delirium, then there develops the most atypical paranoid dementia known to psychiatry. These twice-injured patients are not only paranoid but they show worse than childish absurdities in judgment and in conduct and in extremes of irritability. These all are cases of insufficiency of brain cells, an acquired insufficiency. Because brain tissue does not regenerate after destructive injury (embryologists and histologists all agree that no new

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brain cells are made after birth), inflicted or acquired paranoid deviation from organic brain disease is incurable. These acquired paranoid do not hereditarily handicap their children as do the hereditary paranoid and as the congenital paranoid may.

#### HYPOPLASIA

Persons who have a hypoplasia or insufficiency of brain cells from any cause and who go insane from any cause have a paranoid coloring of their psychoses, e. g., paranoid dementia *præcox*, paranoid manic depressive, paranoid involutional melancholia, paranoid paretics, etc. All are incurable.

#### PARANOID ATTITUDE IS NORMAL AT NINE AND ONE-HALF

Unlike dementia *præcox* or hysteria, which are so often regarded as a return to infantilism, we have observed that when normally evolving children reach the mental age of nine and one-half years, they usually show what we regard as a paranoid attitude. They do not want their mistakes, especially their errors of omission, noted or commented upon. They are approaching the age when they want recognition or merit badges for the things they do well. They are not yet adult-minded enough to realize that every effort that fails or is not made carries its own penalty—to make a ferry, a man may have to jump successfully or else get penalized by falling into the river or staying ashore and waiting for the next ferry. At the age of nine and one-half they are stronger than they were when younger, but they are still individualists, and they are being bombarded by the impingements of social demands. They often fail to measure up to expectations made of them, especially when they are expected to have endurance and persistence. When they fail to survive, they must excuse themselves, meanwhile shifting the blame onto others, even if in so doing they show puerile, often ludicrous, judgment. They must survive: that is Nature's decree. So they survive somehow. To aid them to survive during this period when the personality may so easily be crushed and self-expression checked, they find comfort in the self-flattery that they do not do other things which "bad" other children, older or younger, do. Such psychology is quicksand, and is a poor foundation for the building of a good personality.

During this period, the children are hurt and are not helped when parents or other adults make specific comparisons, either favorable or unfavorable. "I'm glad *my* little girl doesn't do those awful things that little Janie does. Tsk! Tsk!" Or, "Why don't you do as well as little Oscar does?" No child is exactly comparable with another child, sibling or otherwise. The worst comparison is, "When I was a child I wouldn't think of being (or acting) as you are." The failing memory of adults is anti-suicidal, for adults.

Paranoids become too facile at comparing themselves with others, comparing, however, their own good points with unattractive characteristics in others.

#### IMMURITY MAY CAUSE THE PARANOID ATTITUDE TO PERSIST

In normal children the paranoid attitude is outgrown as they mature in strength and in judgment sufficiently to be more socially capable.

However, in children who mature late, in delayed puberty, endocrine persisting juvenility, the paranoid attitude is persisting. It persists well into adolescent years, and thus becomes an important trait or habitual viewpoint coloring the personality through adult years. This explains why so many paranoid are sex-disinterested; the endocrine immaturity allows them to remain in love with themselves; the sex immaturity may show itself in persisting masturbation or in some homosexuality or in faint heterosexuality. Too much emphasis need not be placed on the immaturity of sex. It is Nature's ruthless eugenics method, for inasmuch as paranoid states render those so afflicted with the inability to be good parents, biologically or socially or both, paranoid make poor conjugal mates, and their families tend to drift apart. Most paranoid do not marry, and those who do have a low birth rate and are not likely to remain married for life.

If what we have said, based upon our observations, is true, namely, that children at nine and one-half go through a paranoid phase, then it must be true there are natural ways for a normal child to outgrow this phase. We have tried to ascertain what these natural ways are so that we may enhance them to hasten the maturation of the budding personality in normal children and to modify or limit the tendency of paranoid deviation in constitutional inferiors. We have said that paranoid thinking has its roots in absence of self-criticism and in improper comparisons. Children are organisms which, among other things, are growing in learning and in physical strength and activity. Thus, if a teacher grades a nine and one-half year old child's paper, say in arithmetic or spelling, "82% R, 18% W" and marks the wrong answers which are to be corrected, say for half value giving him a score of 91%, the child is learning to accept criticism in a way which naturally leads to self-criticism for faults and to self-approval for rightness. The standard for rightness here used is conformity. But if the teacher merely grades some papers "P" (passed) and others "F" (failed), she has missed a valuable opportunity to assist the child toward honest self-evaluation.

We find another clue in the physical play life of children of this age. They are too young for formalized teams or teamwork, but they are old enough for competition. When a boy finishes third in a field of seven runners in a little race,

he is helped if the judges tell him he was third of the seven, and not simply that "Jimmie won first place." He is helped if he honestly learns just exactly how good and how poor he is.

True comparisons lead to true self-evaluation. Honest bank bookkeeping keeps us from overdrawing our accounts. However, a child is handicapped if he is either totally condemned or if he is "spoiled" and his excuses are one hundred per cent accepted. He is warped if he overhears adults (usually parents) totally condemned or totally praised. Justice may be tempered with some mercy, modified by love and respect, and expressed with good manners. All cases of brain cell hypoplasia or insufficiency do not nor need not become or stay paranoid.

#### MENTAL EVOLUTION OF PARANOID ATTITUDE

Mentally the fundamental defect is lack of critique (self-criticism), and from that all the other conditions develop. A person who is aware only of his own good characteristics and is unaware of his poor or bad characteristics or insufficiencies is neither able to discipline himself as he grows up nor to eliminate or minimize his undesirable tendencies or characteristics. Absence of appreciation of the existence of abnormality is called lack of insight. A paranoid person has no insight and cannot see the personality defect even when it is pointed out to him by others. That is why paranoid deviation is not self-correctable.

The second stage follows when he thinks too well of himself. At this stage there is, of course, a concomitant inability to appreciate others, for in them he *does* see mistakes, limitations, defects or undesirable characteristics.

The third stage is that he expects others to appreciate him for what he thinks he is, a superior. But being of a mental age of nine and one-half in this regard, he is unable to cooperate with others; he is individualistic and cannot participate in the give-and-take of team efforts. As he does not contribute to the group, they do not esteem him, or, as he says, they do not appreciate him. Also, he does not regard the rules of the group, the conventions, the customs or the laws as suitable for him; they may be imposed on him, but he does not accept them as proper and binding on him. Group self-government is achieved by normal people and may be transmitted to their normal descendants: a paranoid does not feel that the laws of self-government are binding or applicable to him. He may disregard them a little or a great deal.

The fourth stage is one of perplexity. He is puzzled. He seeks an answer. Why is he not appreciated? He is finer than others. They, his inferiors, they who make mistakes which he would not make, do not appreciate him. Why? He pushes his own virtues under the noses of others, he points out their mistakes to them, he becomes

a public critic or even a public scold, and he is disappointed and almost confused in his thinking. Ah! The explanation comes to him.

The fifth stage is attained when he feels that others are jealous of him. That is why he is so lonely. But, he asks himself, is it true? (Note, that late in stage four he was almost confused in his thinking. This confusion grows.) He looks for significant signs that they are jealous of him. He finds a few, far-fetched signs. He confuses the signs and their significance. His thinking never was bare-facedly honest, and because of the constitutional defect in him, i. e., lack of critique, he has had to confuse fact and wish, or confuse the presence of some fact and the absence of other facts.

This stage, over-estimating himself and believing that those who differ with him are, *a priori*, jealous of him, is not an insane state of mind. It may be psychopathic. It may be egomania. *Mit mir und Gott*. If it goes further, it may be insane or at least will surely be psychopathic. But in many if not in most cases of paranoid deviation, the tendency does not go beyond the fifth stage. Rather it broadens out at this stage. The pre-paranoid, or, if you will, the paranoid personality, becomes frightfully and painstakingly busy to prove to the world that they should not be jealous of him. He has a mission in life to perform, or he may be a reformer without an enduring following. Painstaking? Yes. When one finds a person who is too painstaking, who spends a lifetime "perfecting an invention," or who by type and code "proves" Bacon wrote Shakespeare, or who "proves" that God said . . . or who "proves" by signs and symbols that "we are the chosen people, so let's have pogroms to eliminate false claimants," or who painstakingly engraves the Lord's prayer on the head of a pin "and it took him twenty-five years to do just this one masterpiece of handcraft," etc., then one finds a self-disclosed paranoid personality. Some of these do a wonderful amount of good in the world, and some, especially the anti-this or the anti-that reformers, do a tragic amount of harm, starting wars or schisms.

There are many varieties of the paranoid psychopath which are described in text books of insanity. Socially they are regarded as eccentrics, "queer sticks," aloof or "goofy," unstable in purpose and perhaps unstable socially. Some become addicted to drugs or other hurtful practices. Some start borderline crazy schools of thought in religion or in economics and convince less paranoid but equally psychopathic followers who are chronically dissatisfied. Normal evolution is by enhancement of normalities and uses experience. Paranoiacs, however, leave behind them a trail of tragedies, dupes of plausible-talking, non-recognized psychotics.

The sixth stage in the psychological evolution of paranoid mental states is over the line and

within the realm of psychiatry. These insane paranoid have graduated from ideas that other persons are jealous of them into the delusional belief that other persons persecute them. And in a confusion of fact and plausible fancy, they rationalize substantiating proofs that they *are* persecuted. They correlate signs which to the rest of the world are not correlated nor correlatable, they believe that signs and clues *refer* to them, they thus develop ideas of reference, and they systematize these delusions of reference and of persecution.

#### PARANOIDS CANNOT BE DISSUADED

Paranoids' actions, if socially valuable, are good. However, their actions are regarded as bad if the paranoid individual is bitter and anti-social in his program, for under such circumstances he is implacable.

#### PARANOID ANTI-SOCIAL CONDUCT

Paranoids are misfits. They are sanctimonious quarrelers who cannot change. They talk plausibly, and much of what they say is true. Therefore, they seem to be sensible, but because their thinking is radically confused, their conduct is non-conforming. Often they are glib verbalists and perennial agitators. Fortunately for the too busy world, there are paranoid shock troopers in both camps on every controversial issue and these paranoid sling mud at each other and stalemate each other.

Children of eleven or twelve or older who are paranoid deviates are misfits in school, in every phase of school life except in those departments which feature self-expression. Elsewhere, too, they are a burden. They are chronically maladjusted. They are unhappy and may feel abused; they bring unhappiness to everyone with whom they are long in contact, and they tend to abuse privileges and to abuse other people.

As mentioned above, in domestic efforts paranoid are misfits. No sane mate nor sane child can live out his life expectancy under the same roof with a paranoid. Money makes no difference.

Legally the paranoid are regarded as responsible for their selection of conduct, with the exception of the extreme cases which in law are called cases of monomania. Actually a paranoid is what he is because he is a paranoid. There is a pathological restriction on his freedom of choice or volition.

#### TREATMENT OF DEFINITE PARANOIDS

Nevertheless, the world of his environment does not have to stand for his nonsense being inflicted on the innocent, non-paranoid majority. Equally without reproach or hope for reform, the paranoid must be treated factually. The more seriously deviated a paranoid personality has become and the more bothersome or menacing his

conduct has become, the more seriously must society act to protect itself. If a paranoid is bothersome, it is advisable that he be diagnosed as paranoid psychopathic or psychotic, and after the diagnosis has been publicized, he should be allowed to drift. Paranoiacs, being misfits everywhere, naturally become drifters. Therefore frequent change of environment is in order: paranoid who are held in a fixed environment become more and more bitter and thus become dangerous to those whom they accuse of persecution. Let them drift. If a paranoid becomes menacing, then he must be institutionalized until in senility his paranoid ideas lose their "voltage." Short sentences or early release from commitment are mistakes in cases of paranoid personalities who were *healthy* when adjudged.

This statement needs immediate explanation. Ordinary people, no more insane or paranoid than thousands of the rest of us, although they may be lonesome, seclusive and relatively non-successful, may, if sickened with some toxic or poisonous condition (thyroid toxicosis, or Bright's disease, or lead poisoning), when thirty-three, thirty-four, or thirty-five, or so years old may have a paranoid state lasting a few months or years as a reaction to some environmental or social stress or strain, such as disappointment. They may recover mentally after physical recovery. Of course, it is to be remembered that a person becoming paranoid from ordinary causes as described may, at thirty-three, have an incidental physical sickness then which has no causative relationship with the mental state. Anyone may be sick; a feeble-minded person may break a leg without either condition being related at all to the other condition. Because most cases of paranoid insanity, e. g., paranoid *præcox*, have become committable by the time they are thirty-three years old, it is generally recognized that thirty-three is the precarious age as regards paranoid deviation. Why, we do not know.

Paranoids who are more than a menace are assassins, character assassins or reputation assassins. They should not be allowed freedom, freedom to travel, to be in public, or to use the mails. A threat, whether expressed orally or written and sent by mail, is a threat. When the person who threatens is paranoid, psychopathic or even paranoid insane, since paranoid deviation is sure to endure for life (with the exception of cases of temporary ill health mentioned in the preceding paragraph, c. f. *supra*), the prosecuting attorney should act to save the savable, i. e., society, and should ignore the unchangeable mental state. Probation or later parole are not to be considered; in fact, either would be misconstrued as a mixture of approval and license. Judges who are elderly and experienced need not be so advised, but since young judges may misuse mercy and hurt both society and the mentally afflicted, the prosecuting attorney should bear the responsibility of supplying instructions to the judge and to the jury.

Social surgery, i. e., institutionalization, amputating the threatening member from the body politic, is in order, whereas paltering with paranoid threatening is inexcusable.

Paranoids who have become criminal in action, sane or insane, are recidivists. In repeating their crimes, each paranoid always follows the pattern of his preceding crime, bizarre as that pattern may be. Life sentence, net not gross, is the only proper sentence. Pardon, if ever extended, should be extended only after senility has rendered a paranoid decrepit.

The insane paranoids should be kept for life in institutions for the insane (exception, c. f., *supra*). There is a tendency for some superintendents of crowded state hospitals or veterans' hospitals to parole paranoid insane committed patients when they are no longer "disturbed," when they have achieved a quiet adjustment to state hospital life. There is a parallel tendency for these superintendents to trust that relatives can safely supervise these paranoids if paroled. The superintendents realize that paranoids do better in changes of environment, and that is why paranoids are changed from ward to ward and from institution to similar institution. However, public welfare demands that those who are insane for life be institutionalized for life, or until senile, and (exception c. f. *supra*) be not paroled. Permanently paranoid insane may in time become the best of institution helpers and thus in reality more than earn the expense of their institutional care. Their delusions, however, are not abandoned, but in an environment where everyone realizes that the plausible-speaking paranoid persons really are insane, the delusions merely become quiescent.

#### SENILE PARANOIDS

Paranoid variety of senile dementia, of course, occurs late in life and not in the thirties. Organically it is associated with senile brain atrophy and often with arterio-sclerotic brain atrophy. In such cases there may or may not have been a lifetime of antecedent eccentricities. This form of senile dementia starts earlier than the depressive or other forms of senile dementia; its onset usually is after the involution, and it progresses rapidly into a delusional state of self-justification and reform. As Dr. Frank Norbury pointed out, some of these cases, in a vague and delusional way, wander about the country. Others dedicate their fortune and remaining years to some of the reform or humanitarian movements which are being foisted upon the public. These movements usually have a few islands of concrete ideas in a sea of vague thoughts beyond whose near horizon lie uncharted and unimagined reefs and perils. Some of these movements they originate; and being so sincere and plausible, they succeed in talking normal but gullible, restless, unsuccessful persons into interest and participation in these

various movements, usually to the detriment of the normal persons who were not wary listeners. These paranoid seniles are more apt to be self-pitiful than conceited, but they have no pity on those who conservatively do not follow them or who oppose them. Psychiatric identification of these cases usually is not made or is overly long deferred. Once made, however, such cases should be promptly institutionalized until extreme old age renders them practically bed-ridden or housebound.

#### CONCLUSIONS

Paranoid deviation is associated with an insufficiency of brain cells, which although usually hereditary, may be from congenital hypoplasia, or it may be acquired from destruction of brain tissue.

It is a normal phase which children go through when nine and one-half years old. Persisting immaturity may lead to the paranoid attitude persisting and coloring adolescent and adult thinking. Paranoid thinking is puerile thinking, lacking critique and drawing unwarranted comparisons.

Proper child guidance will lessen paranoid tendencies.

Paranoid deviation develops by recognizable, psychological stages; only the most extreme cases become insane. Usually by the age of thirty-three or so each case is as far developed as it will probably develop.

Paranoids are incurable misfits and betray their own inability to adjust successfully. They are all a burden to society, family, school, organization or persons in the environment; some become a bother; some of those become a menace; a few of them become character assassins or reputation assassins; only a very few become insane, and of these a very, very few become criminal in action. The tendency is to get worse; they cannot improve.

Paranoids tend to drift, to keep changing the environment. Except in cases which are severe, it is advisable to let them drift. Paranoid criminals and paranoid insane should be permanently institutionalized, and not be paroled until they have become so senile that they have no vigor to execute their ideas.

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## TORSION OF THE SPERMATIC CORD\*

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Torsion of the spermatic cord erroneously has been considered an uncommon entity due to the fact that the condition is not often recognized. Many cases which are recognized are not reported in the literature, and those reports published are often found in journals not read by the general practitioner. The doctor in general practice probably sees more of these cases and sees them earlier than the surgeon or urologist. If the physician has never seen a case of torsion previously, it is not unlikely that the diagnosis of strangulated hernia, orchitis, or epididymitis will be made unless he has the diagnosis of torsion of the cord in mind.

Probably the first report of a torsion of the cord was published by Delasiauve in 1840. About two hundred cases have been reported since that date.

Apparently no age is exempt from this condition. Taylor<sup>1</sup> reported a case in a new born child and Nicolodini<sup>2</sup> in a man sixty-two years old. Young adults are more prone to develop torsion of the cord; about two-thirds of the cases occur before the age of twenty years<sup>3</sup> and 47 per cent between the ages of fifteen and twenty-five<sup>4</sup>.

Torsion is found more frequently in the right cord, occurring three times in the right side to twice in the left.<sup>5</sup> It is more common with undescended testes. In one series 15 per cent of the cases had bilateral torsion<sup>6</sup> but this seems unusually high.

When torsion occurs, there is a twisting of the spermatic cord diminishing or occluding the blood supply to the epididymis and testicle. The disturbance in circulation is responsible for the symptoms and pathological changes found. The torsion may occur in either direction. Marquardt<sup>7</sup> infers that the twist occurs more frequently by the testicle rotating from within outward, but in all of Clute's<sup>8</sup> cases the twist was in the opposite direction. The number of turns in the cord varies, depending on the mobility of the scrotal contents, and has varied from one-half to five turns.<sup>8</sup>

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<sup>1</sup> Taylor, M. R. A Case of Testicle Strangulated at Birth, Castration, Recovery. *Brit. Med. Journ.* 1:458, 1897.

<sup>2</sup> Nicolodini, C. *Archiv. fur klinische Chirurgie*; p. 163, 1890.

<sup>3</sup> Scudder, C. L. Strangulation of the Testis by Torsion of the Cord. *Ann. Surg.*, Vol. xxxiv, p. 234, 1901.

<sup>4</sup> Clute, H. M. Torsion of the Spermatic Cord. *Boston Med. & Surg. Journ.*, Vol. 181, p. 231, 1919.

<sup>5</sup> O'Connor, V. J. Torsion of the Spermatic Cord. *Surg. Gyn. & Obst.*, Vol. xxix, p. 580, Dec., 1919.

<sup>6</sup> Quoted from: Ormand, J. K., Torsion of an Intra-abdominal testis. *Ann. Surg.*, Vol. 85, p. 280, 1927.

<sup>7</sup> Marquardt, C. R. Torsion of the Spermatic Cord. *Wisconsin Med. Journ.*, Vol. xxxiv, p. 33, Jan., 1935.

<sup>8</sup> Corner, E. M. International Clinics, London. Vol. iv, 17th series, p. 228.

Anatomically two distinct types of torsion occur<sup>9</sup>: extravaginal and intravaginal. In the extravaginal type the tunica vaginalis and testicle rotate together being separated from the surrounding fascia, and the spermatic cord rotates in its extravaginal portion. This type is always caused by trauma. The intravaginal type is more common. Here the testicle is unusually mobile or loosely attached so that it is quite movable in the tunica vaginalis. In these cases the twist of the cord is always intra-tunical between its attachment to the testicle and the reflexion from it of the tunica vaginalis.

Clinically two general types of torsion are recognized: acute (complete torsion) and chronic (incomplete torsion). In the former the symptoms are more acute, often with a systemic reaction and a more abrupt onset. In the chronic form the attacks are recurrent, the pain less severe, and the testis rights itself early when the cord becomes untwisted. The former usually terminates with gangrene of the testicle while the latter is prone to cause progressive atrophy.

### ETIOLOGY

The etiology is vague although it is definitely known that undue mobility of the testicle and cryptorchidism predispose to this condition. The various causes given by different writers are outlined below.<sup>10 11 12 13 14 15</sup>

### PREDISPOSING CAUSES

- (1) Undue mobility of the testicle
  - (a) Voluminous tunica vaginalis
  - (b) An unusually long gubernaculum
  - (c) Loose scrotum
  - (d) An abnormal attachment of the cord to the testes
  - (e) An abnormally long or practically absent mesorchium
- (2) Imperfect descent of the testicle
  - (a) Abnormal flattened condition of the testicle
  - (b) Unusual length of gubernaculum
- (3) Congenital twist of the cord
- (4) Associated pathology
  - (a) Hydrocele
  - (b) Teratoma
  - (c) Tuberculosis of the testicle and epididymis

<sup>9</sup> Young, H. H. Young's Practice of Urology. W. B. Saunders & Co., Vol. 2, p. 164, 1926.

<sup>10</sup> Keyes, E. L., Collings, C. W., Campbell, M. F. Torsion of the Spermatic Cord. *Journ. of Urology*, Vol. 9, p. 519, 1923.

<sup>11</sup> Rigby, H. M., Howard, R. J. Torsion of the Testis. *Lancet*, Vol. 1, p. 1415, 1907.

<sup>12</sup> Campbell, M. F. Torsion of the Spermatic Cord. *Surg. Gyn. & Obst.*, Vol. 44, p. 311, 1927.

<sup>13</sup> Kretschmer, H. L. Torsion of the Spermatic Cord. *Journ. Urology*, Vol. 24, p. 91, 1930.

<sup>14</sup> Johnson, H. A. Two Recent Cases of Torsion of the Spermatic Cord with Strangulation of the Testis. *New Eng. Journ. of Med.*, Vol. 204, p. 899, Apr., 1931.

<sup>15</sup> Babcock, J. W. A Case of Torsion of the Spermatic Cord with Teratoma of the Testicle. *J. A. M. A.*, Vol. 66, p. 1699, 1916.

## EXCITING CAUSES

- (1) Trauma
  - (a) Attempts at reducing "hernia"
  - (b) Squeezing of testicle
  - (c) Blow to testicle<sup>16</sup>
- (2) Muscular effort placing strain either of the abdominal or cremaster muscles
  - (a) Walking
  - (b) Physical strain

A number of cases have been reported when this occurred during a sleep when a combination of the above evidently was the etiological factor. This is in accord with O'Connor's<sup>16</sup> view, who says, "The degree of torsion . . . the cord undergoes, depends indirectly upon the freedom of the testicle to be rotated inside the tunica (vaginalis) and directly upon the strength of the (cremaster) muscular contraction."

## PATHOLOGY

The degree of pathological change present varies according to the completeness of the twist and to the length of time it has existed.

Grossly the proximal portion of the cord is normal or slightly edematous. It contains dilated or flattened veins and a dilated but usually patent spermatic artery. There is commonly fluid present in the tunica vaginalis; straw colored in the early cases, serosanguineous in the later cases, and a blood clot may be present in the gangrenous stage. The surrounding tissue is edematous in acute torsion and fibrous in the recurrent (chronic) type. The distal portion of the cord and the epididymis are swollen and bluish in color. The testicle may be of normal size or greatly enlarged and is bluish black or gangrenous. Sections reveal a thrombus of the cord below the twist, and the testicle and epididymis resemble an organized blood clot.

Microscopic study shows a hemorrhagic infarction or interlobular hemorrhage to be present in the early cases, but atrophy and fibrosis are seen in cases of long standing.

## SYMPTOMS

The onset is usually sudden and occurs with a varying degree of pain. The patients state that after physical strain, they noted a sharp, stinging or sickening pain in the testicle or groin of the affected side. The pain may radiate down the thigh or up the spermatic cord. In acute cases the pain becomes progressively worse and is most severe in twelve to twenty-four hours. The leg of the affected side may be flexed at the thigh. When the testicle becomes gangrenous, there is a diminution of pain, and it may even disappear, but the tenderness may persist for a long period of time. In the chronic form with recurrences, the testicular pain lasts for a short time until the cord untwists, then the patient is free from pain until the next attack. Nausea and vomiting are not

uncommon at the onset but do not persist. The temperature rarely goes above 100° F. and does not occur early. After twelve to twenty-four hours, the scrotum or overlying skin is reddened, edematous, tender, hot and enlarged. Not infrequently there is an elevation of the testis due to reflex cremasteric contraction and shortening of the cord by torsion. Recurring attacks show mild transient swelling of the scrotum. There may be frequency or urination. A marked systemic reaction is sometimes manifest with chills, a temperature ranging from subnormal to 104° F., abdominal distension, vomiting and even mild shock. This is not the rule, however. Asymptomatic torsion has been reported<sup>17</sup>.

## DIAGNOSIS

An absolute diagnosis is infrequently made until the testis and the cord are exposed by surgery. Torsion of the cord is probably most often confused with inflammatory conditions of the testicle and epididymis in the descended testicle and strangulated hernia in the undescended. With referred pain and systemic manifestations, the condition may simulate many diseases. Culper<sup>18</sup> reports a case of torsion with symptoms similar to appendicitis. Many patients with torsion have noticed unusual mobility of the affected testicle and state that the testicle had ascended into the external ring on occasions. On examination the opposite testicle often gives evidence of increased mobility. Torsion of the cord of the undescended testicle is probably the more difficult diagnosis to make, especially if it occurs in young children. These cases have accentuated local and general symptoms and can give all the symptoms of a strangulated hernia in the early cases. Later, the differentiation may be made in that there is no absence of bowel sounds, fecal vomiting or obstipation present in torsion. The absence of the testicle in the scrotum of the affected side should always be a warning when the diagnosis lies between torsion and hernia. It should be kept in mind that a strangulated hernia is relatively rare in children. When strangulation of a hernia occurs, the symptoms gradually increase, while in torsion the onset is sudden, and the symptoms gradually decrease. If there is no history of a hernia being present previous to the onset, the diagnosis should be torsion of the cord until proved otherwise.

Without the history of a previous gonorrhreal infection and urethral discharge, the diagnosis of torsion is more probable in a painful, swollen scrotum than epididymitis. The systemic reaction is greater with epididymitis, the temperature is elevated two to three degrees, its onset is less painful and the edema of the scrotum is more pro-

<sup>17</sup> Edington, G. G. Strangulation of the Freely Descended Testicle from Torsion of a Pedunculated Mesorchium. *Lancet*, p. 1782, Jan. 25, 1904.

<sup>18</sup> Culper, R. C. Acute Torsion of the Right Intra-abdominal Spermatic Cord, the Symptoms of Which Simulate Acute Appendicitis. *Surg. Gyn. & Obst.*, Vol. xxi, p. 250, 1915.

nounced. An examination of the internal genital organs and their secretions will usually rule out an inflammatory disease of the testicle or epididymis. Prehn<sup>19</sup> on two occasions, differentiated between torsion and epididymitis by elevating the scrotum and noting that those patients with torsion were not relieved by the support. This may cause a costly delay as the treatment of torsion must be immediate. Kretschmer and Keyes both report cases that were not relieved by supporting the scrotal contents.

Orchitis is a comparatively uncommon disease and should not be confused with torsion. It usually occurs in conjunction with the mumps or as a result of trauma in the form of a hemorrhagic reaction. Syphilitic orchitis has a slow development, is not painful and a luetic history or positive serology make the diagnosis.

McKay<sup>20</sup> gives the following findings to aid in the diagnosis of torsion: (1) elevation of the scrotal contents, (2) edema of the scrotum, (3) mild degree of tenderness compared to that found in acute infection of the scrotal contents.

#### PROGNOSIS

The prognosis in these patients is good, there being no case recorded which ended fatally. The fate of the affected testicle depends greatly upon the length of time elapsing between the onset and the time treatment is instituted, although "atrophy of the testicle is a very probable outcome whatever treatment is employed." (4) Too often an early diagnosis is not possible as some patients will endure pain for hours before consulting a physician. In the recurrent cases the testicle eventually becomes atrophic often remaining tender or accompanied by neuralgic pain.

The atrophy which is so often found present in cryptorchidism has been attributed to the fact that the testicle has not had the favorable temperature which is afforded by the thermostatic action of the scrotum<sup>21</sup>. It seems probable in many of these cases, especially before puberty, that this atrophy is caused by an incomplete torsion of the testicle rather than the unfavorable temperature.

#### TREATMENT

There have been cases reported<sup>22</sup> where non-surgical detorsion has been successfully done. This is never certain and in early cases the treatment should always be surgical.

<sup>19</sup> Prehn, D. T. A New Sign in the Differential Diagnosis Between Torsion of the Spermatic Cord and Epididymitis. *Journ. of Urology*, Vol. xxxii, p. 191, Aug., 1934.

<sup>20</sup> McKay, H. W. Torsion of the Spermatic Cord with Gangrene of the Testicle. *Gyn. Surg. & Obst.*, Vol. 37, p. 373, 1923.

<sup>21</sup> Quoted from: McKenna, C. M., and Ewert, E. Management of Undescended Testicle. *J. A. M. A.*, Vol. 105, p. 1172, Oct. 12, 1935.

<sup>22</sup> Dowden, J. W. Recurring Torsion of the Spermatic Cord with an Account of Five Cases. *Brit. Med. Journ.*, p. 932, Apr., 29, 1905.

When the condition has existed for a short period, and at the time of operation the testicle and epididymis appear viable or show a return of circulation after detorsion has been done, an orchidopexy should be performed.

An orchidectomy should be resorted to when gangrene of the testicle is found. This procedure should also be done in adults with torsion of an undescended testicle when transplantation of the testis seems inadvisable or impossible.

In the event that the patient is first seen at the stage after gangrene has taken place and the pain is subsiding, or when the testicle has atrophied, it is probably better to treat the patient conservatively with support, rest and heat rather than to carry out any operative procedure. Later, if tenderness or pain persists, an orchidectomy may be in order.

A plastic operation has been described<sup>23</sup> as a prophylactic measure to prevent torsion in those cases with a redundant scrotum or a mobile testis. It has also been recommended that the opposite testicle be fixed in the scrotum when torsion has occurred, as this condition is often bilateral. Undescended testicles should be transplanted into the scrotum before the age of puberty.

#### CASE REPORTS

The two cases below are typical and show the difficulty and errors which confront one in making the diagnosis of torsion of the cord.

*Case 1.* F. J., a white male, 20 months old, entered the James Whitcomb Riley Hospital on August 25, 1935. The infant's mother stated that she noticed a painful mass in the boy's left inguinal region while giving him a bath the day before admission. When she palpated the mass, the child cried with pain. Believing that the child had a "rupture," she sought the advice of her family physician. After several unsuccessful attempts at reducing the "hernia," the doctor advised the mother to bring the child into the hospital to have an operation for hernia. Except for the tenderness, the child had no other symptoms.

The physical examination was negative, except for a marked edema over the entire left inguinal region with redness and tenderness. This edema extended down involving the scrotum. Due to the edema present in the scrotum, it was difficult to determine whether or not a testicle was present below the external ring, but it was thought to be palpable.

The laboratory work gave normal findings, except for a white blood count of 10,950 with a differential of 44% polymorphonuclear leukocytes, 46% lymphocytes, 2% metamyelocytes, and 8% band cells.

The preoperative diagnosis of strangulated hernia was made, and on the day of admission the

<sup>23</sup> Ottenheimer, E. J., Bigwood, C. Y. Testicular Fixation in Torsion of the Spermatic Cord. *J. A. M. A.*, Vol. 101, July 8, 1933.

inguinal canal was opened by an oblique incision. A gangrenous testicle was found resulting from a torsion of the cord, and an orchidectomy was done. The patient made an uneventful convalescence.

*Case 2.* G. L., a white boy, 13 years of age, entered the James Whitcomb Riley Hospital on August 11, 1933, complaining of a tender mass in the left lower inguinal region, severe pain of sudden onset in this area, and vomiting. According to the patient and his parents, the testicles had never descended. Two days previous to admission, the patient had been struck suddenly with acute pain in the left inguinal region and had vomited. At the time of admission the pain had greatly diminished, but the tenderness had persisted. There was nothing of significance in the family or past history.

Physical examination revealed nothing abnormal except for bilateral cryptorchidism and in the left inguinal region a mass about 2x3 centimeters in diameter which was tender on palpation with some edema of the overlying skin.

The admitting room diagnosis was "possible strangulated hernia." Three days later a progress note states ". . . surgery cancelled because of elevated temperature. The tumor mass in the left inguinal region is thought to be a hydrocele." On August 23, 1933, the patient was operated with the preoperative diagnosis of cryptorchidism, and a gangrenous testicle caused by torsion of the cord was removed. This patient made a satisfactory recovery and was dismissed from the hospital on September 6, 1933.

#### COMMENT

Torsion of the testicle should always be suspected in cases where there is a history of sudden pain in the testicle or inguinal region, especially if the scrotum on the affected side is empty or unusually tender and edematous. It is only by early diagnosis and treatment that the testicle can be saved, then the treatment should always be surgical. Two cases are presented which demonstrate the confusion which may exist in diagnosing this condition. If the diagnosis of torsion had been considered, a correct preoperative diagnosis could have been made in both cases.

I wish to thank Doctor W. D. Gatch for his suggestions and aid in the preparation of this paper.

702 WILSON ST.

PLAN NOW TO ATTEND  
THE SOUTH BEND SESSION  
OCTOBER 6, 7, 8, 1936.

## ABSTRACTS

### WHAT IS SOCIAL OBJECTIVE OF THE YOUNG PHYSICIAN?

In his discussion NATHAN B. VAN ETEN, New York (*Journal A. M. A.*, March 7, 1936), advises that while employing all the progressive results of scientific research, one should not forget the sound lessons of the past and try to encourage highly educated young physicians to take the places of leadership in community life for which they are potentially qualified. The young physician's social objective may not point higher than making an honest living, but if this aspiration is based on respect for a high quality of service the health of the people will be in safe hands. The development of this objective lies in the hands of those who are privileged to carry on the teaching of advanced students: 1. They must educate themselves by active membership in medical organizations. 2. They must select fewer medical students with severer scrutiny of character qualifications. 3. They must carry on intensive teaching of clinical medicine. 4. They must promote inspirational preceptorial contacts between teacher and pupil. 5. They must try to develop medical citizens whose education will entitle them to leadership in their communities. It is the author's belief that raising the level of the practical education of all young physicians and attempting to impress them with their civic responsibility will strengthen their ability to handle all their social and economic problems.

### COLONIC IRRIGATION

FRANK HAMMOND KRUSEN, Rochester, Minn. (*Journal A. M. A.*, Jan. 11, 1936), defines colonic irrigation as lavage of the large intestine. Colonic irrigation is not to be considered as a massive enema but as lavage of the colon above the area of defecation, administered under low pressure so that the defecation reflex is not stimulated. One must also consider that in conjunction with the lavage there are possibly other factors present (such as pressure, temperature, motion and osmosis) which may act to influence normal and disturbed physiologic processes in the gastro-intestinal tract. Copious amounts of fluid are usually employed. Antiseptic solutions or solutions which tend to acidify or alkalinize the colonic contents are of little or no value. Tap water or physiologic solution of sodium chloride seem, as a rule, more satisfactory. The term "high colonic irrigation" should be abandoned. The attempt to introduce a long stiff tube into the cecum is dangerous and usually fails, the tube coiling in the rectum. If the tube is introduced only three or four inches, under ordinary conditions the fluid will reach the cecum in from two to five minutes anyway. Elaborate apparatus is not necessary for the administration of colonic irrigations. Colonic irrigations have been greatly exploited by charlatans, ignorant lay persons and, most unfortunately of all, by men within the medical profession. The oft-repeated or routine administration of colonic irrigation is to be strongly deprecated. Whereas an occasional series of colonic irrigations may be indicated for the treatment of unfavorable conditions within the intestinal canal, as for example at times in arthritis, or for the removal of retained fecal material from the colon, such indications are relatively infrequent.

### DISAPPOINTING RESULTS FROM IONIZATION TREATMENT FOR HAY FEVER

MAXIMILIAN A. RAMIREZ, New York (*Journal A. M. A.*, Jan. 25, 1936), used the ionization technic recommended by Warwick in fifty cases of true (seasonal) pollen cases, so-called hay fever, and twenty-five were cases of nonspecific perennial vasomotor rhinitis that did not give a positive skin reaction to allergens ordinarily used in testing. In the group of non-specific perennial vasomotor rhinitis he believes that there was evidence of benefit and that the vast majority were improved. In the hay fever series (seasonal pollinosis) the treatment was a complete failure. Passive transfer tests performed with the serum of several of the hay fever patients showed no variation whatever following ionization treatment.

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JUNE, 1936

**EDITORIALS****CORONARY DISEASE**

Coronary disease has been occupying a place of prominence in the columns of the medical press within recent years. It is generally maintained that the disease is definitely on the increase, though some writers maintain that this is because we are more accurate in our diagnosis of the condition. Whether or not this is true, the fact remains that coincident with the rise in the death rate from coronary disease, the incidence of endocarditis and myocarditis seems to be decreased. While we are inclined to accept the latter theory, yet a study of those cases among persons whom we knew intimately would seem to lead to the conclusion that coronary disease actually is on the increase. Occasionally death follows the ingestion of a hearty meal, and the diagnosis of acute indigestion is given; in the light of present knowledge, we know that these persons die from coronary disease.

A recent article by Francis P. Denny<sup>1</sup> records his observations made from an investigation of deaths from coronary disease in a Massachusetts city of approximately fifty thousand population. The size of the city seems important to us, in that it lends itself to a more personal study. Four hundred sixty-one deaths from coronary disease, over a period of thirty-five years, form the basis of the study. A graph accompanies the article which clearly shows the increase in the rate during the period. In accounting for the marked increase, Dr. Denny attributes it not so much to worry as to the changed conditions under which we are living, and we agree with him.

Referring to those cases with which we have been more or less intimately acquainted, we recall that these folks had undergone marked changes in their daily routines. Men who took systematic exercise, who walked a lot and played a lot, became motor addicts; seldom did they use their legs except for an occasional game of golf. Again we agree with Dr. Denny in his discussion of the increase of coronary disease among physicians, for he maintains that the cares of a modern practice are no more exacting than those of former years. Physicians of thirty years ago had just as many troublesome cases to ponder over and their social and economic problems were no doubt as great, yet coronary disease is commonly entitled "the doctor's disease." Doctors are notoriously prone to advise extreme care in living for others, then fail to observe the most elemental rules for themselves. We know a doctor to whom we have frequently predicted that he will die from coronary disease. For years, he has gotten out his car to drive a distance of exactly three city blocks to get to a news-stand—and he eats with the same speed. He is over-weight, he is of the "pudgy" short-coupled type, just the sort in whom one would expect a coronary disaster.

We must agree that the emotions play a part in this thing, but it should be remembered that William J. Mayo remarked, last year, that coronary deaths were frequent among physicians who as a class must have strong control of their emotions.

Coronary disease also has frequently been termed "the golfer's disease," from the fact that so many of its victims have their attacks while playing golf. It should be remembered, however, that these folks are not getting daily exercise; their golf is limited to one or two days each week, and in the summer season. In the meantime, they have forgotten the art of walking; they use their cars for incredibly short distances; they almost never push the lawnmower, and the use of a garden hoe has become a lost art with them. If you will but look about you, and make a casual study of those cases of coronary disease among your acquaintances, we believe you will agree with us, that these deaths are most commonly found in those who have forgotten how to play, for walking and similar exercise is but a form of play for the adult.

Dr. Robert Preble, of Chicago, once addressed a medical meeting on "The Heart of the Man of Fifty." He stressed the importance of a single symptom—the complaint of becoming tired so frequently. Too often, Dr. Preble said, the physician overlooks the grave importance of this in the man of fifty.

Give more attention to your patients in this group. Inquire as to their daily habits. See to it that they get *regular* exercise in some form—walking is highly recommended. Get them out of their automobiles and into the open; encourage a hobby of the sort that will bring into play muscles

<sup>1</sup> Denny, Francis P.: Increase in Coronary Disease and Its Cause. *New Eng. Jnl. Med.*, Apr. 16, 1936.

that seemingly have forgotten their functions. If you will do this, you will find a corresponding decrease in mortality from coronary disease among your patients.

## HEALTH EDUCATION IN PUBLIC SCHOOLS

It is our opinion that the medical profession has given far too little attention to what is being taught in the public schools concerning health and disease. The principles now being promulgated in the schools will almost surely be the hope or the despair of the medical profession a generation hence. Such being the case, we shall look with interest upon the new plan whereby an employee of the Division of Public Health (State Board of Health) is being loaned by that division to the State Board of Education to work in conjunction with the board in furthering a real program of physical and health education.

This physical and health educator will have much influence in determining the scope and nature of health education, and he and his methods should be closely watched by the medical profession. As the plan now stands, he is to be a physician thoroughly in sympathy with the objectives of organized medicine and familiar with rational health ideals and with educational methods whereby these ideals can be approached. He will strive to attain some degree of uniformity in the health teaching of the various schools; he will seek to eradicate fads and error; he will instruct teachers in methods and subject matter to be used; he will advise the State Board of Education in various matters pertaining to health education; and he will pass upon the validity of the various programs which are constantly being proposed to the schools in the interest of health.

In addition he can serve a most important function in coordinating the various health activities with the program of the schools. Teachers, parents, doctors, dentists, and nurses are all working toward the ultimate good of the child, but they do not always understand one another. It is not uncommon to hear teachers criticizing the physicians of the neighborhood because they are not public-spirited enough to do a lot of things for nothing; and it is likewise not uncommon to hear physicians referring in uncomplimentary terms to the absurd practices of the schools. Many of the health texts are written by educators and would-be educators who have no idea of the scientific principles involved. They are merely repeating sets of rules which they have learned from some source without being able to adjudge the validity of the source. Certain authors are so obsessed with the value of the New York City Board of Health that they are urging children to go to their local boards of health for all sorts of services which are not available and should not be avail-

able in communities such as our own. Many of the principles of hygiene now advocated in current texts are absurd in the light of modern science.

The active cooperation of the profession is ardently solicited in the new endeavor. Suggestions from the field will be of great assistance, though it should be understood that the new office will have jurisdiction only over health *instruction* and will have nothing whatever to do with physical examinations or any sort of treatment or diagnosis. We must be reminded also that he will scarcely be able to police the teaching profession. If there is a teacher in your school who is teaching quackery to the neglect of the well established principles of health, hygiene, and sanitation, you will have to handle the problem locally and on the merits of the particular case.

This editorial is a call to the profession as a group and to its members as parents and responsible citizens interested in the welfare of the children to find out what is going on in the schools, to the end that we may do the right thing about it.

## OUR PRIMARY SYSTEM

The Indiana primary has come and gone. Its net results are a two-way ticket for the inspection of the voting populace, next November, and a lot of headaches—the latter being about all many of the candidates got out of it.

In some forty years of voting, we never before have known such a campaign. It was quiet, distressingly so to many candidates, and with the exception of an occasional spot over the state, there were few political combats of the sort that are wont to enliven this biennial event. For the most part, Mr. John Average Voter kept his own counsel. He evaded the queries of the poll-takers, and often his intimates knew naught of what was going on in his mind.

New wrinkles were developed in many sections of our state. In Lake county was one that might well be termed a first-class racket. Old-timers declared they "never heard of such carryings-on." As one expressed it to us, "I never before knew that one county could have so many clubs and organizations as I have contacted during this primary. It sure was a 'gyp' of the first water." The scheme was worked something along these lines: a group got together, chose a name and a meeting place, then proceeded to advise all candidates, irrespective of party affiliations, that on a certain date this organization would hold an open meeting to which all candidates were invited, with the idea of introducing them and having them tell the assemblage just what particular claim each might have to this or that office. However, upon accepting the invitation, they were accosted at the entrance door by one who advised that, because of the expense of the meeting, a little "donation" would be quite in order. Of course, the candidate fell for this in many instances, and

created a sizable jack-pot to be distributed among the promoters. Contributions varied from one to ten dollars; sometimes even more was requested.

The originators of the plan seem to have met with instant success, and it was not long until there were numerous imitators in the field. As many as a half dozen of such "meetings" were staged on a single evening, and the candidates were literally on the run in an effort to attend all of them. Who can say what proportions this thing would have reached had the campaign lasted another month!

The most disturbing element about our primary law is the fact that, notwithstanding the ballyhoo of such a campaign in our more populous centers, the average citizen knows little or nothing about the majority of our candidates. Back in the old days, such information was almost instantly available from the precinct committeemen or elsewhere, but not so now; the "organization" has its slate and will advise concerning none other than those whose names appear thereon. The Indiana legislature recently enacted a measure intended to curb slate making, but the evil was as great or greater in the recent primary than in former years. This slate-making business long since got out of all control. We can remember when the county chairman who took an active part in slate-making was taken to task by the county central committee and told in words of one syllable just what would be done with him and to him if he persisted in his nefarious activities; county chairmen adopted a "hands off" attitude in connection with such matters. Nor did the mayors of our cities lend themselves to ticket making, as is so commonly done in these modern days; everybody, his brother, and all the family connections seem to have gone in for some sort of slate.

The Indiana primary law is not to our liking. The claim that it is ultra-democratic is not based on sound logic. The poor man has little chance in a primary for it is a very common occurrence for the candidates to spend more money in seeking a nomination for office than the salary for the office will pay him in a full term.

We are opposed to the present primary law set-up; we much prefer the old county convention system, for we believe that far better tickets were nominated under that plan than result from the enormous amount of ballyhoo of the present primary.

## THE COURT DECIDES

It is not often that we are very much interested in court decisions, either of a local justice of the peace or the Supreme Court of the United States, but a recent *Bulletin* of the American Medical Association reported a decision of the United States Circuit Court of Appeals, Tenth District, which was much to our liking. The case was entitled "John R. Brinkley vs. the members of the

State Board of Medical Registration of the State of Kansas, together with the Attorney General of that state." The decision was rendered on April 7, 1936.

Brinkley, it will be remembered, acquired considerable notoriety a few years ago by his blah-blah broadcasts from his privately owned radio station. Chief among his assets as a business producer, aside from his mannerisms used in addressing his unseen audience, was the advertising of his "compound operation" which was declared to be a sure-fire cure for "impotency, high blood pressure, epilepsy, dementia praecox, and diseases of the prostate gland, the kidneys," etc. He advertised that he accomplished these miraculous results by the transplantation of goat glands, occasionally resorting to those of the human variety. For the implantation of goat glands he extracted the modest sum of \$750 from his patients; the use of human "gonads" required a payment somewhat larger—\$5,000. Brinkley also was charged with radio prescribing, and is said to have had a unique system established whereby the gullible would be sent to certain designated drug stores, there to purchase prescriptions by number; Brinkley is alleged to have made a profit on such sales.

Then the Kansas Board arose and smote Brinkley squarely amidships. They detached him from his license to practice in Kansas, whereupon Brinkley brought suit in the local U. S. District Court, which upheld the Board. Brinkley appealed to the District Court of Appeals, which upheld the lower court. Judge McDermott read the decision, a masterpiece worthy of the attention of every reputable practitioner of our profession throughout the country. He showed that not only was he thoroughly familiar with the record of the case from the lower court, but he had no hesitancy in expressing his opinions of Dr. Brinkley and his methods of practice. In upholding the action of the Kansas Board in revoking Brinkley's license, Judge McDermott said: "The legislature enacted that membership of this board should be confined to physicians and surgeons because they alone have the education and experience to determine such questions as are here presented. Does this record disclose no more than a conflict of opinions among reputable surgeons as to the technique of operative procedure, or as to when it is indicated? Or does it disclose that appellant was using his license to perpetrate a cruel hoax upon the public by exacting extravagant fees for a trivial and worthless operation? Did appellant endanger the health of his patients by seducing them into the belief that serious diseases could be cured by a surgical hocus-pocus? Whether it is the one or the other is a question peculiarly for the decision of men skilled in anatomy. There is a great volume of evidence in this record to support the latter conclusion; and if such is the fact, the board would have been derelict if appellant's license had not been revoked. It is true, as counsel argue, that the great advances in medical science

have come about by the courage of pioneers, whose efforts often met with ridicule from their professional brethren. It is true that doctors even yet disagree. It is also true that charlatans masquerading as doctors defraud the public to their own enrichment by promising to cure cancer with innocuous ointments, and thus endanger their lives by depriving them of sound medical advice. Between these two extremes there is a twilight zone, where doubts might perplex. But unless we can say, from the record, that there is no doubt that this is a mere disagreement among doctors, the finding of the board is not open to our review. The legislature has properly committed the vital question of the fitness of those who administer to the sick to a skilled board of medical men, and not to courts unlearned in the art."

The Judge further comments on the evidence that a woman had wired Brinkley concerning a pain around her heart, and that he made a diagnosis of a kidney involvement and prescribed therefor; another wrote concerning a pain in the right side, only to be advised that this was probably a gall bladder and (get this one!) Brinkley prescribed one remedy "if you are a man," another "if you are a lady!" Later on in the decision is found this: "The power of the state to protect its citizens against imposition by those purporting to practice the learned profession has been sustained without dissent for many generations." He also quoted the decision of Justice Hughes, in March, 1935, who held that a state board has the power to find a dentist guilty of unprofessional conduct, in that he extravagantly advertised his professional abilities.

One of the arguments presented by Brinkley's attorneys was the fact that newspapers operate medical question boxes and medical columns. The decision refers to this as follows: "Those that have fallen under our observation prescribe simple and well known remedies for minor ailments. If such newspapers purport to diagnose and prescribe for serious and obscure diseases they ought to be suppressed. (Italics ours.) We commend this particular thought to the Bureau of Legal Medicine of the American Medical Association.

This, then, appears to be the close of a legal battle of long standing, and the final undoing of one who not only betrayed the greatest of the professions but appealed to the gullible by the newest of advertising methods. Surely such a denouement of Brinkley should arouse more than a casual interest on the part of those in charge of the Federal radio bureau. For some years we have maintained that broadcasts should be subject to a closer scrutiny on the part of those in charge of that department of our Federal government. A review of the details of this case will supply numerous reasons for investigation of similar broadcasts.

## MEDICAL EDUCATIONAL PROBLEMS

Fred C. Zapffe, secretary of the Association of American Medical Colleges, in addressing a recent meeting of the North Central Association of Colleges and Secondary Schools, is quoted as saying that pre-medical courses given by American universities hinder rather than help the prospective medical student. He is quoted further as saying that medical students who have not had an overplus of the sciences in their college work do much better in our medical schools.

Dr. Zapffe is in a position to speak with no little authority on this subject, since for many years he has devoted his entire attention to this and to similar problems. He is correct in his argument that the pre-medical student in our colleges is rather a man apart; that is, he should not be rated exactly as other students are rated. For example, in the department of chemistry, the medical student is not interested in those things that demand the entire attention of the student who plans chemistry as his life vocation. Similar analogies may be made throughout the average course.

For a good many years we have been on the board of trustees of one of our smaller colleges and have given much attention to this problem of pre-medical education; in that time we have seen numerous changes, most of which have been for the better. We have noted the progress of students from this college as they went along the medical course, and have been gratified with the successes they have made.

Dr. Zapffe criticizes some of our colleges because they have ignored the recommendations made to them by his organization. We hesitate to believe that this was an overt act, rather do we feel that it came about through a misunderstanding of the things required. We feel sure that our American colleges want to play fair with our pre-medical students and that if the college authorities are properly contacted, all will be well. This thing of studying to be a doctor has come to be a man's sized job and the student needs all the help and advice he can get. During the past winter we had occasion to observe two first-year medical students during the holidays when they were "boning up" for an examination. Our observations led us to believe that the past three decades have brought about radical changes in our teaching systems, with most of which we are in accord.

With the constant advances in medical knowledge, the medical student has his work cut out for him if he gets but a part of it; hence, his pre-medical study should be such as to lay the best of foundations. It is hoped that the pre-medical teaching institutions and the medical colleges will get together on this thing and iron out all their problems.

**EDITORIAL NOTES**

Dues paid? This is your last Journal if you aren't paid up!

An A. M. A. committee, reporting to the House of Delegates regarding the matter of determining the parentage of children by blood tests, says, "It is not possible to state with any degree of certainty that the child is the offspring of a certain adult or that the latter is the father or mother of the child." Thus once more does one of the newer theories meet with a distinct upset. The attitude of our legal friends regarding this decision will be interesting.

If THE JOURNAL does not appear on your desk on the morning of July first, the chances are that you should hold a little interview with your county society secretary; most likely he will advise you that THE JOURNAL does not come to those who are delinquent, as of June first. Sorry to thus discommod you, but it is an inexorable law of the Association. If you do not have your 1936 card and wish to maintain an unbroken file of THE JOURNAL, we suggest that you seek your secretary right now and make the proper amends.

Physicians have been known to boast that they "haven't cracked a book" for five years. Others admit that they subscribe to a few but actually read no medical magazines. They're too busy. Still others seldom if ever attend medical staff and society meetings and rarely visit state and national medical assemblies. Don't be deceived. This is not bragging; psychically, it is a defense mechanism vainly put forth to stem the ebbing tide of mental acuity. False hope. Five years is a long time, as is evidenced by the changes of the past five. A ten-year period is still longer. Idling brain cells, thoughts declutched, can do naught but burn up reserve resources needed, perhaps, to take you somewhere. Who knows?

A new committee is to be appointed by the A. M. A. for the purpose of studying the subject of air-conditioning. We are glad that such an appointment is to be made, because we feel that there is a need for an intelligent, scientific study of this question. Mr. John Public seems to like the sound of the words "air-conditioned," and various railroads, hotels, and restaurants have taken advantage of that fact. That the problem is not solved is evidenced by the number of complaints regarding the "catching of colds" as a result of remaining in certain air-conditioned

places. This committee will have plenty to do in arriving at proper conclusions, and their report will be awaited with much interest.

Recent activities on the part of "G" men bring to mind the importance of physicians in many cases, through their reports to local police of all cases of gunshot wounds which they are asked to treat. Many of our cities have ordinances requiring physicians to report all such cases, and we believe such regulations to be very worthwhile. An Indianapolis physician recently was of great assistance in bringing to bay several members of a gang of robbers and killers. Whether your locality requires it or not, have no hesitation in reporting to the proper authorities all such cases. We wish to compliment the government agents on their present activity. The Prohibition Era is blamed for bringing about a most unwholesome disrespect for law and order; the government agents are doing much to restore the proper degree of respect for authority.

Governor Landon of Kansas, an aspirant for the Republican nomination for President, no doubt added to his popularity by his utterances before the opening session of the Kansas City A. M. A. convention. He discussed medical problems, chief of which he believes is the possible danger of socialized medicine. "Medicine will not willingly be made the servile instrument of politicians or the instrument of a domineering bureaucracy," said the Governor. "American medicine continues to be individualistic and on that basis is distinguished from medicine in many foreign countries." The Governor then went on to say that he had every reason to believe that our profession is competent to solve its own problems and that he had no doubt but that the whole matter would be "ironed out" to the complete satisfaction of all concerned. It is refreshing to hear such comment from one so prominent as Governor Landon.

If the attendance at the Kansas City session of the American Medical Association may be taken as a criterion, medical men are meeting-minded this year of 1936. Long before the opening day, the hotel facilities of that city were engaged, and those who neglected to make reservations were sorely pressed for living quarters. So, once more we remind you that it will be well to make your reservations for the South Bend meeting well in advance. We recall that Gary hotel accommodations were sold out, and that late comers had to go to adjoining towns to find resting places. You may take it from us that the South Bend meeting will be nothing less than a jamboree; the local folks already have completed plans for the

best meeting in the history of the Association. And plan to take your wife with you, for arrangements have been made for entertaining the women from early on Monday morning until after the close of the convention.

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Back in 1925, at the Marion convention, we spoke of Dr. William Niles Wishard as the "grand old man of Indiana medicine"; since that time we have frequently repeated that title in speaking of this most representative physician, and it was with no little pleasure that we read an editorial in the Indianapolis *Star*, which referred to Dr. Wishard as the "grand old man of Hoosier medicine." The editorial was written concerning a special dinner meeting of Phi Rho Sigma, honoring two Indianapolis physicians, Dr. Wishard, professor of genito-urinary surgery, and Dr. Charles E. Ferguson, professor emeritus of obstetrics in the Indiana University School of Medicine. Two finer men never represented the medical profession of this state.

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A new wrinkle in "health talks" before school children seems to have been developed in one of our Indiana cities where, according to newspaper report, the public relations man of the national chiropractic association talked to the high school students. Of course the speaker took occasion to dilate upon the importance of the "bumpers" or "shock absorbers," which are found in the spine, "holding the bones apart with layers of muscles." Leaving the spine, he then proceeded to tell his audience how to give the eyes a daily exercise. Just why school authorities give such talks places on their programs is quite beyond us; we would recommend to the physicians of this community that they see to it that their county medical society establishes an educational program in the local school, under the direction of a proper committee.

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Alert and studious physicians everywhere cannot help but be impressed with the inevitable and inexorable conclusion that, as the economic pressure becomes greater and still greater, destructive influences leading to the insidious deterioration of medical practice have passed from the phase of mere threat to that of actual accomplishment in many places. It requires real courage and the sternest mental discipline to withstand the terrific assault. At the recent post graduate assembly, a busy, general practitioner in a relatively small city voiced this opinion and substantiated it with a few pertinent facts from his own practice. During the preceding week, in one day, working from

morning until late night, he had seen forty patients. He calculates that each patient had received an average of twelve minutes of his professional time. Among this clientele were three new patients; one with diabetes, one with nephritis, one with possible cancer. The good doctor honestly and frankly deplored the situation. All of us know why.

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What with all the clamor of recent years anent the socialization of medicine, with the consequent insurance features, it was expected that the "easy money" folks would soon get into some sort of a racket in this connection. Now comes the story from a southern suburb of Chicago to the effect that a glib young salesman called upon several local doctors, trying to sell them membership in a health insurance program. It seems that he made a flat failure of this, but nevertheless made quite a canvas of the suburb, selling numerous sick insurance policies, to each of which was attached a series of coupons, or certificates; these were represented as being just so much cash when presented to a local doctor. The policy, plus the certificates, were sold for ten dollars each and were represented to cover illnesses, both medical and surgical, of an entire family. In due time these certificates began to appear in the various medical offices and, of course, the holders thereof were advised that they had been properly bilked. It is quite probable that the same scheme will be tried in other communities and if you are approached by such a salesman, let him explain his project to your police department.

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The annual report of the Board of Trustees of the American Medical Association gives some interesting A. M. A. Fellowship figures, and among them is a table showing the number of physicians in each state, together with the number of A. M. A. members and Fellows. Be it understood that all physicians who are members of their county medical society are members of the state organization and of the American Medical Association. A. M. A. Fellows are in a separate classification; they have applied for Fellowship and sent in their subscription to the *Journal of the American Medical Association*. About fifty per cent of the 4,049 physicians in Indiana are receiving this *Journal*, generally conceded to be the best and most informative medical publication extant. However, but 1,447 of our 2,800 Association members are Fellows of the A. M. A. The Fellowship fee is but seven dollars per year, which includes the weekly *Journal*. *Journal* subscriptions in Indiana showed an increase of 32 in 1935, which is not enough; we recommend that all our members become A. M. A. Fellows. This can be accomplished by the simple

expedient of making application and forwarding same, together with the fee, to 535 North Dearborn Street, Chicago.

The following comment concerning "iodine" socks comes from the U. S. Department of Agriculture:

The question as to what to do about "iodine socks" came as something of a break in the routine at the Philadelphia and Baltimore stations of the Food and Drug Administration. Quack cures for human ailments usually fall into a grouping already familiar to specialists who enforce the Food and Drugs Act. But "iodine socks" were a bit of a novelty. They came from England.

Customs officials referred the matter to the food and drug offices. The socks in one lot were labeled to indicate iodine content and the label recommended them as "invaluable to sufferers from gout, rheumatism, flu, colds, varicose veins, bad legs, corns, bunions, and aching feet." The Baltimore office reported an odor suggesting iodine, but more particularly iodoform. Since the socks were labeled with "unwarranted therapeutic claims" and the importer was ready to abandon the shipment, their destruction was suggested.

At Philadelphia a shipment was not labeled, but was accompanied by "literature" making equally broad claims. The upshot was that this consignment got by after the printed matter was destroyed. Anyone who wants to buy iodine socks may be able to find them on the market, but the Food and Drug Administration is not recommending them as a panacea.

Engel<sup>1</sup> reviews a series of 453 transurethral sections over a period of five years. Of these, sixty-two were done for carcinoma of the prostate; the remaining 391 were performed for the various types of benign hypertrophy. A second resection was necessary in only six of the benign cases, and this would seem to remove one of the objections registered when the operation was revived a few years ago. Among the many advantages recorded is less risk to the patient, together with a markedly diminished morbidity. There are four deaths recorded in the benign case group. The average hospitalization was nine days, the shortest was four days, and the longest forty-four days. Little preoperative preparation is made in those cases in which the bladder is not badly infected or atonically over-distended. A blood urea determination is made, and the kidney function observed. Spinal anesthesia is used and the rectoscope inserted; if the case is not deemed suitable for this type of operation, the patient still has had the advantage

of a cystoscopic examination under anesthesia. In only one of the cases was it found necessary to open the bladder for the purpose of controlling hemorrhage. The catheter is removed on the second day and the patient is given bathroom privileges. The postoperative discomfort may be said to be negligible in most cases. The patients in this group, which were operated upon during the last three years, seem to have fared a bit better than the earlier group, probably because of a better established technique. Ninety per cent of the entire group seem to have been entirely relieved. In the malignant cases, much relief has been obtained and a decided longevity is noted. Thus does an operation which was first described many years ago by our own Dr. William Niles Wishard seem to have been established.

The oft-repeated complaint regarding quarantine regulations not being enforced is voiced by the editor of the *Hammond Times* in the following editorial, with which we are in full accord:

"Why is it that Hammond's so-called intelligentsia cause more trouble under quarantine than do the poorly-educated classes, and what accounts for the fact that less immunizations against contagious diseases prevails in the 'silk stocking' districts than in the less wealthy areas?

"The city health commissioner failed to answer the questions after voicing the indictments in his talk before Hammond Rotary Club last Tuesday.

"We do not profess to know the answers, but we do know that such conditions are a disgrace to a class of our citizens who should be leaders in such important matters of community health.

"Well-educated persons surely cannot question the need for quarantine or for immunization. The medical profession has proved their desirability beyond all question of doubt.

"Quarantine, which amounts to segregation of persons afflicted with highly contagious diseases, is an absolute necessity in any heavy-populated urban center. Without it, such fatal ailments as smallpox, scarlet fever, diphtheria, and the like would sweep over the community unchecked and take hundreds of innocent lives.

"Immunization is a preventive measure that has been tested thoroughly and successfully in fighting infection among man and beast. Medical records are replete the world over with its efficacy.

"In short, any mother, educated or otherwise, who fails to protect her children against fatal infections through prejudice against immunization is a danger to her household and an enemy to society.

"And parents who deliberately violate quarantine because of the irksome restrictions it imposes, are criminals, no more no less, and should be considered such by their neighbors who have a stake at issue in the violation."

<sup>1</sup> Engel, Wm. J.: *Cleveland Clinic Quarterly*, April, 1936.

**HOUSE OF DELEGATES OF THE AMERICAN MEDICAL ASSOCIATION**

KANSAS CITY SESSION, MAY 11-15, 1936

D. F. CAMERON, M.D.

Fort Wayne

The House of Delegates met in the assembly room of the Muehlebach Hotel, Monday morning, May 11. A large proportion of the delegates were present, including the four representatives from Indiana, namely, Drs. Sensenich, Hamer, Crockett and Cameron. Early in the session the Speaker appointed the reference committees and Dr. Sensenich was made Chairman of the Committee on Legislation and Public Relations, an important assignment.

The House was greatly shocked and saddened to learn of the sudden and critical illness of the very friendly, popular, and distinguished president-elect, Dr. J. Tate Mason, of Seattle. His address was read by the vice-president, Dr. Kenneth Lynch. The other routine annual reports of officers and the reports of the Board of Trustees, of the Judicial Council and of the Council on Medical Education and Hospitals were then read. Finally, the usual large number of suggestions for legislation and proposed resolutions were presented and referred to the appropriate Reference Committees for study and recommendation.

On Monday afternoon opportunity was given to all interested to attend and take part in the discussion of the various subjects before the Reference Committees. This opportunity was made use of extensively, and rightly so, for it prevents much thoughtless and hasty action. On Tuesday both the forenoon and afternoon sessions of the House were taken up in considering and acting upon the recommendations of the various committees. A very large amount of work was done, of which the following is a rather condensed summary:

1. The House, by unanimous vote, decided to install Dr. Mason as President of the American Medical Association, *in absentia*.

2. Approved in spirit the requirement that members of the staffs of hospitals approved for interne training should be members in good standing of the American Medical Association.

3. Reaffirmed its recommendation made at the Cleveland meeting that the work of all medical technicians be done under the supervision of licensed physicians.

4. Took the position that in the light of present knowledge the parentage of an infant cannot be determined by laboratory methods, and recommended that the Board of Trustees be authorized to have this question investigated further by competent persons.

5. Disapproved the granting to any commercial organization of a wave band for the "radio paging" of physicians.

6. Authorized the committee appointed a year ago to investigate certain phases of the question of contraception, to continue its work, and make a further report at the next annual meeting.

7. Recommended that local societies readjust if necessary the extra charge for mileage, in view of improved transportation facilities, so that no valid complaint against this part of the cost of medical care may be made by rural families.

8. Recommended strongly that State Boards of Medical Examination and Registration be more diligent in revoking the licenses of physicians convicted of a felony, in particular of those convicted of violation of the provisions of the narcotic act. This request is made for two reasons, as follows: (a) the federal authorities concerned have already complained of this lack of discipline, and (b) the American Medical Association does not wish to have on its rolls as members in good standing those serving time as a result of conviction on a felony charge.

9. Took action designed to help the State of Oregon in its attempt to drive out the extensive unethical hospital and professional contract practice prevalent in that state.

On Thursday afternoon Dr. J. H. J. Upham, of Columbus, Ohio, was made president-elect of the American Medical Association, and Dr. Charles G. Heyd, of New York, was elected vice-president. Dr. Olin West was re-elected secretary of the Association and was given a special vote of commendation for his work. Dr. Van Etten and Dr. Shoulders were re-elected speaker and vice-speaker respectively, and Dr. Thomas S. Cullen was re-elected to membership on the Board of Trustees. Dr. Herman Kretschmer, on nomination of the Board of Trustees, was re-elected treasurer. Atlantic City was selected for the next annual meeting.

On Monday night the delegates were given a delightful reception and dinner by the local society, and on the following evening attended in a body the opening general meeting at which Dr. Mason, *in absentia*, was installed as president of the Association. Noteworthy among the speeches of welcome given by local and state officials was that of Governor Landon of Kansas. He expressed forcibly and clearly his convictions against the socialization of the practice of medicine.

To the meeting was brought a considerable quantity of gold in the form of Alpha Omega Alpha, Phi Beta Kappa and Sigma Xi keys, and it was noted that the House of Delegates had its share. But there is a much more important qualification that a delegate should possess than the brilliance which the above mentioned insignia might indicate. He should have that balanced perspective in medicine which comes only to those doctors whose work and pay is derived from the service they render patients coming voluntarily to them for medical care. Except in rare instances that doctor is not qualified to be a delegate who holds a salaried position in medicine or whose work and income depend chiefly on service rendered other doctors. The doctor to whom the patient goes for care is the one who is best able to direct properly the activities of the Association. The overwhelming majority of the members of the House of Delegates are of this type and can be counted upon to act in the interests of the overwhelming majority of the members of the American Medical Association.

Indiana physicians who registered at the Kansas City session of the American Medical Association are:

- |                                  |                                    |                                   |                                 |
|----------------------------------|------------------------------------|-----------------------------------|---------------------------------|
| C. J. Adams, Kokomo.             | Verna Christopel, Mishawaka.       | A. N. Ferguson, Fort Wayne.       | C. H. McCaskey, Indianapolis.   |
| H. E. Allen, Richmond.           |                                    | Samuel Ferrara, Peru.             | J. W. McEwen, Terre Haute.      |
| Robert L. Armington, Anderson.   | James F. Clancy, Hammond.          | P. W. Ferry, Kokomo.              | W. C. McCormick, Terre Haute.   |
| R. B. Bayley, Lafayette.         | George A. Collett, Crawfordsville. | L. L. Frank, South Bend.          | F. A. Malmstone, Griffith.      |
| Raymond C. Beeler, Indianapolis. | C. C. Collins, Roachdale.          | George J. Garceau, Indianapolis.  | R. J. Masters, Indianapolis.    |
| M. E. Beverland, Indianapolis.   | Herman T. Combs, Evansville.       | Frank M. Gastineau, Indianapolis. | E. L. Mattox, Terre Haute.      |
| David A. Bickel, South Bend.     | Charles J. Cooney, Fort Wayne.     | W. D. Gatch, Indianapolis.        | L. T. Meiks, Indianapolis.      |
| Chas. E. Bills, Evansville.      | Harry L. Cooper, South Bend.       | A. S. Giordano, South Bend.       | H. B. Mettel, Indianapolis.     |
| C. B. Bohner, Indianapolis.      | Philip M. Corboy, Valparaiso.      | O. M. Graves, Princeton.          | H. A. Miller, Marion.           |
| T. R. Borders, Fort Wayne.       | Donald A. Covalt, Munifie.         | F. L. Hade, Bridgeport.           | Milo K. Miller, South Bend.     |
| William W. Bourke, Marion.       | Paul D. Crimm, Evansville.         | H. G. Hamer, Indianapolis.        | Orval J. Miller, Fort Wayne.    |
| J. W. Bowers, Fort Wayne.        | F. S. Crockett, Lafayette.         | Earl H. Hare, Indianapolis.       | A. M. Mitchell, Terre Haute.    |
| C. L. Boyd, Vincennes.           | John E. Dalton, Indianapolis.      | Verne K. Harvey, Indianapolis.    | H. G. Morgan, Indianapolis.     |
| Frances T. Brown, Indianapolis.  | Wm. D. Davidson, Evansville.       | E. R. Haslem, Terre Haute.        | J. L. Morris, Princeton.        |
| C. R. Buikstra, Evansville.      | John A. Davis, Flat Rock.          | E. L. Hays, Indianapolis.         | A. E. Mozingo, Indianapolis.    |
| A. E. Burkhardt, Tipton.         | F. C. Dilley, Brazil.              | Bennett Kraft, Indianapolis.      | Cleon A. Nafe, Indianapolis.    |
| Don F. Cameron, Fort Wayne.      | George Dillinger, French Lick.     | Edward H. Kruse, Fort Wayne.      | Thomas R. Owens, Munifie.       |
| Ernest R. Carlo, Fort Wayne.     | Wemple Dodds, Crawfordsville.      | C. R. LaBier, Terre Haute.        | E. A. Rainey, Lebanon.          |
| E. L. Cartwright, Fort Wayne.    | Robert E. Downing, Terre Haute.    | V. A. Lapenta, Indianapolis.      | Frank B. Ramsey, Indianapolis.  |
| J. V. Cassady, South Bend.       | W. W. Duemling, Fort Wayne.        | B. J. Larkin, Indianapolis.       | C. W. Rauschenbach, Hammond.    |
|                                  |                                    | Edwin L. Libbert, Lawrenceburgh.  | J. F. Reilly, Vincennes.        |
|                                  |                                    | E. O. Lindenmuth, Indianapolis.   | B. W. Rhamy, Fort Wayne.        |
|                                  |                                    | Ralph L. Lochry, Indianapolis.    | Thurman B. Rice, Indianapolis.  |
|                                  |                                    | Bruce D. Lung, Kokomo.            | F. T. Romberger, Lafayette.     |
|                                  |                                    | Martha B. Lyon, South Bend.       | K. R. Ruddell, Indianapolis.    |
|                                  |                                    | M. W. Lyon, Jr., South Bend.      | Byron K. Rust, Indianapolis.    |
|                                  |                                    | Virgil McCarty, Princeton.        | C. W. Rutherford, Indianapolis. |
|                                  |                                    |                                   | Ira M. Sanders, Greensburg.     |
|                                  |                                    |                                   | Charles E. Savery, South Bend.  |
|                                  |                                    |                                   | Carl P. Schoen, New Albany.     |
|                                  |                                    |                                   | Louis H. Segar, Indianapolis.   |
|                                  |                                    |                                   | C. M. Sennett, South Bend.      |
|                                  |                                    |                                   | R. L. Sensenich, South Bend.    |
|                                  |                                    |                                   | Lester A. Smith, Indianapolis.  |

Martha Souter, Indianapolis.	A. F. Weyerbacher, Indianapolis.
James H. Styall, Indianapolis.	Frank E. Weidemann, Terre Haute.
William G. Symon, Garrett.	Robert M. Wilkins, Fort Wayne.
Charles F. Thompson, Indianapolis.	Matthew Winters, Indianapolis.
H. C. Thornton, Indianapolis.	William Wise, Indianapolis.
P. C. Traver, South Bend.	V. Earle Wiseman, Greencastle.
Harold M. Trusler, Indianapolis.	J. T. Witherspoon, Indianapolis.
E. M. VanBuskirk, Fort Wayne	M. D. Wygant, Mishawaka.
G. W. Warne, Tipton	Albert C. Yoder, Goshen.

#### NOTES FROM THE A. M. A. MEETING

Total registration at Kansas City was 6,749. Indiana registrants totaled 140.

More than 100 Indiana physicians registered during the first two days of the eighty-seventh annual session of the American Medical Association in Kansas City. The medical profession from the Hoosier state played its part in the many phases of convention activity which marked this meeting as one of the most important in the history of American medicine.

The scientific program, with many foreign guest speakers, was considered one of the outstanding gatherings of medical personalities ever assembled at any medical meeting in this country.

Four Indiana men had places on the scientific program: Dr. A. S. Giordano, South Bend, was a speaker on the program of the section on pathology and physiology; Charles E. Bills, of Evansville, gave a lantern demonstration as a part of a symposium on vitamins. A place on the program for the section on dermatology and syphilology was filled by Dr. John Eric Dalton, of Indianapolis, and Dr. Willis D. Gatch, of Indianapolis, participated in the discussion on the program of the surgical section.

Dr. G. D. Scott, of Sullivan, and Dr. D. R. Ulmer, of Terre Haute, had a part in the scientific exhibits this year. They participated in the demonstration of fracture work.

Prominent positions were held by delegates from the Indiana State Medical Association in the House of Delegates. Dr. R. L. Sensenich and Dr. F. S. Crockett are members of the standing legislative committee of the American Medical Association, and Dr. Sensenich served as chairman of the reference committee on legislation and public relations of the House of Delegates during the

special session. To this committee many of the important matters concerning national legislation and economic problems are referred. The other two delegates from Indiana are Dr. Homer G. Hamer, Indianapolis, and Dr. Don Cameron, Fort Wayne.

Various subsidiary organizations held their meetings in Kansas City concurrently with the meeting of the American Medical Association. Dr. C. G. Culbertson, of Indianapolis, was made a member of the executive committee of the American Society of Clinical Pathologists. An unofficial meeting was held by the Federation of State Examination Boards of the United States, of which Dr. J. W. Bowers, of Fort Wayne, is president-elect. Dr. A. M. Mitchell, of Terre Haute, president-elect of the American Aero Medical Association, assisted in demonstrating the exhibit of that organization of tests made to determine the fitness of individuals to be airplane pilots.

Mrs. R. L. Compton, of Richmond, president of the Woman's Auxiliary to the Indiana State Medical Association, presented the report on activities of the Indiana auxiliary at the business session of the national auxiliary.

Members of the Woman's Auxiliary who registered at the Kansas City session of the American Medical Association are:

Mrs. J. C. Armington, Anderson.  
 Julia Armington, Anderson.  
 Mrs. David Bickel, South Bend.  
 Mrs. C. B. Bohner, Indianapolis.  
 Mrs. E. L. Cartwright, Fort Wayne.  
 Mrs. C. C. Collins, Roachdale.  
 Mrs. R. L. Compton, Richmond.  
 Mrs. F. L. Hade, Bridgeport.  
 Lucille House, Indianapolis.  
 Mrs. Norman Inlow, Shelbyville.  
 Mrs. G. C. Johnson, Evansville.  
 Mrs. V. A. Lapenta, Indianapolis.  
 Mrs. Glen Ward Lee, Indianapolis.  
 Mrs. F. A. Malmstone, Griffith.  
 Mrs. G. H. Warne, Tipton.  
 Mrs. Frank Wiedemann, Terre Haute.  
 Mrs. Joseph Wysong, Goshen.  
 Mrs. A. C. Yoder, Goshen.

#### OFFICERS ELECTED AND INSTALLED MAY 13, WOMAN'S AUXILIARY TO AMERICAN MEDICAL ASSN.

President, Mrs. Robert E. Fitzgerald, Wauwatosa, Wis.

President-elect, Mrs. Augustus Kech, Altoona, Pa.

First Vice-President, Mrs. David S. Long, Harrisonville, Mo.

Second Vice-President, Mrs. Prentice Wilson, Washington, D. C.

Recording Secretary, Mrs. C. C. Tomlinson, Omaha, Neb.

Treasurer, Mrs. Eben J. Carey, Wauwatosa, Wis.

## PRESIDENT'S PAGE

### WANTED — A GOOD PRECEPTOR

Many young medical men are at this time completing their university studies; hospital internships completed, many are beginning the private practice of medicine.

Never before have such magnificent institutions and hospitals for the care of every type of illness, equipped with facilities for research, study, and treatment of the sick, been available to students of medicine. The teaching personnel is generally of a higher average of scientific training than at any time in the past. The product, the graduate of today, possesses an amount of medical information probably more comprehensive than the average graduate of some years ago.

Despite the above, which must be credited to progress and medical training, it must be admitted that when the change in methods of medical education took the preceptor from the program of training for the medical student it took a something of value which has never been replaced. Although the graduate admittedly is now better scientifically equipped, he has not had the contact with medical life and has not had the benefit of that guiding influence which a good preceptor would have contributed to his training.

Not all preceptors were good preceptors, but the natural processes of selection by which a community placed its stamp of approval upon the scientifically successful, respected, and beloved member of the Profession was generally not too far wrong. Students sought this professional type as preceptors. A kindly man, experienced in the art as well as the science of medicine, knowing life in the raw, crushing poverty and riches, bigness and littleness, the sublime and sordid, seeing sickness unadorned by family sympathies or social service interests but suffering and torn by emotional stresses from without; a physician, skilled in the management of the ignorant, the uncooperative and contentious, and resourceful in the absence of the most essential facilities—these were the qualifications of the preceptor. The daily experiences were the texts from which he taught and translated into terms of medical knowledge which the student possessed. Experienced advice and example as to methods of patient management were given, and even kindly suggestion in social and economic problems which the physician must meet. It may be added to this picture of the preceptor that the same type of capable medical man exists today, but his services have not been requested. The student and the recent graduate need him.

No unfavorable reflection is directed upon the physician of the teaching or hospital staff of today, to whom we are greatly indebted for unselfish contribution and untiring efforts in the interest of patient and student. However, there still remains

a gap between the university, the hospital, and private medical practice.

No one is so alone as the recent medical graduate, expected for the first time to play his part without prompting, away from the hospital background and under conditions with which he is not at all familiar. Chronic illnesses among the psychologically mal-adjusted constitute a goodly portion of his first patients. Extravagant promises of cures of all kinds of illnesses following treatment by electrical and mechanical equipment are offered by energetic salesmen. Debts are incurred in purchase contracts for much machinery. Too often treatment by use of physio-therapy apparatus takes the place of adequate examination and diagnosis, and financial considerations outweigh the principles which should guide to that which is best in the practice of medicine. Often semi-quackery destroys what might have been an outstanding medical career.

No other preceptorship being available, a certain degree of responsibility must be accepted by the county medical society. Repeated observation in many communities throughout a period of years indicates that the physician who early becomes active in the local medical society develops along lines and toward objectives more advantageous to himself and in keeping with the higher aims of medicine than the individual who joins after his formative professional years are over or does not join at all. An early assignment to society work and the recognized responsibility to the organized profession assists greatly in establishing a desirable anchorage. Enforced, prolonged periods before admission of recent graduates to medical societies are not desirable. Recent graduates are, with few exceptions, both qualified and acceptable to society membership and need the guidance and encouragement that a well functioning medical organization can provide. In fact, the medical society of the county in which the medical school is located should endeavor to establish contact with the student and interne group. The maintenance of a friendly and helpful relationship during the years of training will tend to insure continuance of a desirable relationship in later years. Organized medicine will need the clear vision, the high ideals, and the sound judgment of these young men who must soon assume the responsibility of leadership.

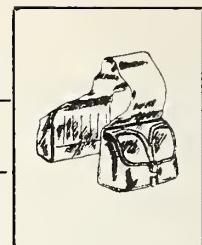
A good physician, in all that name implies, is an incalculable asset, and his qualities and progress reflect favorably upon the whole group.

*R. L. Denserick*



## Indiana Medicine in Retrospect

L. G. ZERFAS, M.D.  
Historian, Indiana State Medical Association



### MEDICAL INFLUENCE IN THE FORMATION OF THE STATE

(Continued from May issue)

Nine days after the General Assembly met for the first time in November, 1816, a petition was filed for the regulation of the practice of medicine which was referred to a committee composed of Dr. Ezra Ferris, William Polke, and Daniel Grass. The biography of Ezra Ferris was published last month and although William Polke and Daniel Grass were not physicians, they were directly connected with doctors.

Judge William Polke was born September 19, 1775, at Cross Creek, Virginia, where Wellsville, West Virginia, is now situated. His father moved to Nelson County, Kentucky, in 1780. When William was seven years old, he with his mother and three sisters were stolen by the Indians and a year later the father located them in Detroit and they returned to Kentucky. In 1806, William Polke moved to Knox County, Indiana, where he died April 26, 1843. His brother, Dr. Thomas Polke, was named as one of the first censors for the First Medical District in Indiana by the act of 1816.<sup>13</sup>

Daniel Grass, the third member of the committee appointed to report on a law regulating the practice of medicine, was reared by Dr. William R. Hynes, a wealthy man of Nelson County, Kentucky, who owned much land in Henderson and Daviess Counties, and who took the opportunity of adopting him as his own son. He married Jane Smithers, and they came to Hanging Rock, now Rockport, in Spencer County, Indiana, probably in 1803. He was wounded in the battle of Tippecanoe, November 7, 1811, and walked on crutches the remainder of his days. He died in 1837 of a stroke of apoplexy.<sup>14</sup> Dr. William R. Hynes was one of the original owners of land where Rockport now stands and entered land in 1818, but he is not listed in the Census of 1820 in Spencer County.

<sup>13</sup> Isaac McCoy, History of the Baptist Indian Missions. Wm. M. Morrison, Washington, D. C., 1840. Logan Esarey, Indian Captives in Early Indiana in Indiana Magazine of History, Bloomington, Ind., Vol. IX, June, 1913, No. 2, p. 95. William Henry Harrison Polk, Polk Family and Kinsmen. Bradley & Gilbert, Inc., Louisville, Ky., 1912, p. 390. James Polke, Polke Memoirs. Ibid, Vol. X, No. 1, Mar., 1914, p. 83.

<sup>14</sup> Laura Mercy Wright, Daniel Grass. Indiana History Bulletin, Vol. 3, Extra number, Dec., 1925, p. 7. Proceedings of the Southwestern Indiana Historical Society. Wm. B. Burford, Indianapolis.

<sup>15</sup> Journal of the Senate, p. 32.

On Friday, November 15, 1816, Dr. Ezra Ferris introduced a bill providing for the commissioning of coroners,<sup>15</sup> and on November 29, 1816, Dr. Ferris from the committee appointed for that purpose, reported a bill to regulate the practice of physic and surgery.

The following notes from the Journal of the Senate and House of Representatives will give briefly an idea of the history of the medical bill.

Wednesday, December 4, 1816, the engrossed bill to regulate the practice of physic and surgery was read the third time and passed by the senate.

Thursday, December 19, 1816, Alexander Little delivered the message, "the House of Representatives has passed the bill from the Senate to regulate the practice of physic and surgery, with amendments, to which they desire the concurrence of the Senate."

Monday, December 23, 1816, a message was received from the governor of the state of Indiana, by Mr. Cobourn, notifying that the "Governor, on this day, did approve and sign the following act which originated in the Senate, to wit, an act to



Judicial Districts of Indiana, Jan., 1817.  
(Adapted from map of Indiana, 1816-1817, Indiana Boundaries, 149, Indiana Historical Collections, Vol. 19.)

regulate the practice of physic and surgery; ordered that Mr. Depauw inform the House of Representatives thereof."

The first act to regulate the practice of medicine in Indiana, is as follows:

**AN ACT TO REGULATE THE PRACTICE OF PHYSIC  
AND SURGERY**

APPROVED DECEMBER 24, 1816\*

Sec. 1. Be it enacted by the General Assembly of the state of Indiana, That for the purpose of regulating the practice of physic and surgery in this state, each circuit as laid off for holding circuit courts, shall compose one medical district, to be known as first, second or third medical district in the state of Indiana, according to the name of the circuit.

Sec. 2. In each medical district, there shall be a board of medical censors, to be organized in the following manner, viz: Doctors Elias M'Namee, Jacob Kuykendall, David M. Hale, Thomas Polke and Joel F. Casey are hereby declared to be and compose the first board of medical censors, in and for the first medical district of the state of Indiana: Doctors Bradley, "of Salem," P. R. Allen, Andrew P. Hay, James B. Slaughter and Samuel Meriwether, shall be and constitute the first board of medical censors, in and for the second medical district; and Doctors Jabez Purcival, L. F. Sacket, D. Oliver, John Howes and Ezra Ferris, shall be and constitute the first board of medical censors in and for the third medical district. The medical censors of the first medical district are authorized and required to meet at the house of Peter Jones in the town of Vincennes, on the first Monday of June, in the year eighteen hundred and seventeen, and the medical censors of the second medical district, are authorized and required to meet at the court house in the town of Salem, on the first Monday of June, eighteen hundred and seventeen; and the medical censors of the third medical district, are authorized and required to meet at the house of Walter Armstrong in the town of Lawrenceburg, on the first Monday of June; in the year eighteen hundred and seventeen, for the purpose of examining and licensing physicians to practice in this state.

Sec. 3. The medical censors of each medical district, or a majority in each district having assembled in conformity to the preceding section, may, and they are hereby required to give notice by a written communication to the practising physicians in their respective districts, that they are appointed a board of medical censors for their respective districts, and that on a day and place certain, to be designated by the censors of each district; there will be a meeting of the licensed physicians in their respective districts, to organize the medical society of the state of Indiana: and that in the meanwhile, they will in conformity to the provisions of this act, on application, examine and license to practice medicine, such as may apply to them and be judged qualified.

Sec. 4. The first board of medical censors in each medical district, or a majority of them when assembled agreeably to the second section of this act, and until they shall be succeeded in office, are, and shall be authorized to examine, and license to practice medicine in this state, all who, on application, may be by them thought worthy of this important trust.

Sec. 5. In each medical district the censors and licensed physicians of such district, having assembled in conformity to the provisions of this act, at the time and place mentioned

and designated by the respective board of censors, may then, and from time to time thereafter, elect their own president, secretary and medical censors; and being thus organized, shall from thenceforward, be known in law and in equity, as a body corporate and politic, by the name and style of the board of physicians of the \_\_\_\_\_ medical district of Indiana, and as such, may sue and be sued, plead and be impleaded, answer and be answered unto, and do and transact such business as they may be authorized by law, in their corporate capacity.

Sec. 6. Should the medical censors or a majority of them, of either medical district, as provided for in this act, refuse or neglect to comply with the requisitions and duties prescribed them by this act by the first day of October next, then, and in that case, it shall and may be lawful for the practising physicians of such medical district on that day to assemble themselves in their respective districts, at the place or places mentioned in the second section of this act; any five of whom having met in such district, may proceed to choose their own president, secretary and medical censors; and shall thenceforward be known in law and in equity, as a body politic and corporate, with the same powers and privileges, as if the same had been formed by the medical censors and licensed physicians of such district as mentioned in the preceding section.

Sec. 7. The board of physicians of each medical district shall have power to make their own bye-laws, not inconsistent with the laws and constitution of this state, and for that purpose may after being organized, at their first meeting, adjourn to any other time and place they may think proper, provided, they shall meet in their own district, and shall not adjourn to more distant time than six months after any meeting, at which such adjournment is made.

Sec. 8. It shall be the duty of the board of physicians of each medical district to admit to membership every physician or surgeon residing or wishing to practice in such district, who shall on examination before them, give proof of their qualification to practice in either of such professions, and reasonable evidence of their moral character; also to expel any member, who may be guilty of intemperance or immorality, on the same being duly proven before them.

Sec. 9. Each board shall publish their meetings a sufficient time beforehand, so that the time and place thereof may be generally known, and for the purpose of defraying the expenses thereof, and such other expenses as may be necessary in carrying into effect the provisions of this act, they may demand of each member on admittance any sum not exceeding five dollars, and a sum of each of the members of the society, not exceeding five dollars annually thereafter.

Sec. 10. No person who is not a member of the board of one of the medical districts of this state, shall have the benefit of the law for collecting his charges for professional services rendered by him after such board is organized: Provided however, Any person obtaining a permit to practice from any two of said board shall be considered as members till their next meeting, and any person a member of any medical society and living in an adjoining state shall be entitled to all the privileges of a member of the board of physicians in this state.

Sec. 11. Each board of physicians shall forward to the president of the senate of this state at their next session, a copy of their by-laws and rules, established according to the provisions of this act, at which time the general assembly shall reserve to themselves the privilege of making such further regulations as they may think proper.

Sec. 12. It shall not be lawful for any physician or surgeon to charge or receive more than twelve and a half per mile for every mile he shall travel in going to and returning home from the place of residence (for the time being) of his patient, with an addition of a hundred per centum for traveling in the night. Nothing in this act shall prevent a future general assembly from making any alterations therein or from repealing it if they deem it expedient, neither shall any provision in this act prevent any person or persons of regular and respectable standing in the profession of physic and surgery in a neighboring state or territory from practicing in this state.

\* Special acts passed and published at the Second Session of the General Assembly of the State of Indiana Held at Corydon on the First Monday in December in the year one thousand eight hundred and eighteen (18 crossed out and 17 written in in ink). By authority. Corydon. Printed and published by A. & J. Brandon, Printers to the State, 1818, p. 83, Chapter XXXIII.



## NEW HEALTH PROGRAM

A health program directed by the Indiana division of public health will be carried on in public schools of the state as a result of recent action by the state board of education in adopting a plan suggested by Dr. Verne K. Harvey, director of the health division.

Details are not yet forthcoming, but the program will be a part of the state's activities in connection with the Federal government's social security program. Dr. Thurman B. Rice, assistant director of the state health department, will be in direct charge of the program and will have the title of director of physical and health education.

According to Floyd I. McMurray, state superintendent of public instruction, the Indiana program is the first of its kind. His statement was based upon word from officials in Washington. Dr. Rice will be in close touch with school officials and teachers as well as with officials of other organizations interested in child health.

Dr. Harvey also announced that in connection with the program the bulletin issued by his department will be enlarged in scope and will be distributed to school officials.

## STERILIZATION OF INSANE

Officials of hospitals for the insane may perform the operation of sexual sterilization on patients only when the operation is authorized by a court order, according to an opinion written by Philip Lutz, Jr., attorney general, for Dr. Richard Schillinger, medical superintendent of the Richmond State Hospital.

"My opinion is that when a court for any reason fails to make any order, or declines to authorize an operation, your institution should treat the case as though the court had found that sterilization was unnecessary and you should not permit the operation," the attorney general wrote.

While the present Indiana law relative to sterilization has not been set aside by the Supreme Court, and in many other states similar laws have been upheld, yet a number of laws in other states on the subject have been declared unconstitutional because they were found to violate some fundamental rights, the attorney general said. "Most of these statutes, which were found to be invalid, provided for the sterilization of criminals, yet the

decisions emphasize the fact that in all cases there must be a careful observance of the rules for notices, court hearings and an opportunity for appeals," the letter to Dr. Schillinger said. "Moreover, while a court might not hesitate so much in entering an order in some cases of feeble minded and mentally defective persons, in insanity cases there is often a possibility of recovery which gives a court serious concern in dealing with a helpless ward of the state."

"The authority of the state institutions in performing the operation of sexual sterilization on insane persons under Chapter 312 of the Acts of 1935, depends entirely on the decision of the court," the opinion said. "There must be a judgment, and the judgment must follow a proper hearing."

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Abandoned coal mines in Clay, Sullivan, Greene, Vigo and Vermillion counties are being sealed by Works Progress Administration workers to eliminate the pollution of streams.

The state public health and conservation departments decided to carry out this work after similar work in Pike County had proved successful. The work includes sealing the mines and diverting the flow of natural surface water. Acids which drain from the abandoned mines contaminate the water.

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Four officials of the Indiana division of public health, headed by Dr. Verne K. Harvey, director, attended the meeting of the American Medical Association in Kansas City, Mo.

Dr. C. G. Culbertson, director of the state department's laboratories, was elected a member of the Board of Censors of the American Society of Clinical Pathologists, which met preceding the American Medical Association convention.

Others who attended the A. M. A. convention were Dr. Thurman B. Rice, assistant director, and Dr. Howard Mettel, director of the maternal and child health division.

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James D. Adams, chairman of the state highway commission, has issued a statement that the average motorist pays only four cents a day, or approximately \$1.25 a month for use of the state's 9,000-mile highway system. The estimate was made on the basis of gasoline tax and motor vehicle fees. Mr. Adams said that the cost of road use is less than the amount paid by the average motorist for automobile insurance and less than half the amount spent monthly by motorists for garage space. Only ten states have a lower average payment for state road use than Indiana, according to the highway commission chairman.

During 1934 the average amount of gasoline tax and license fees was \$30.14, of which \$15.07 went to the highway commission for maintenance of the roads. The remainder went to the counties, cities, and towns for road and street maintenance.

## MEDICO-LEGAL COLUMN

### CORPORATION PRACTICE

BY ALBERT STUMP

ATTORNEY FOR THE INDIANA STATE MEDICAL  
ASSOCIATION

Has a corporation the right to practice medicine?

The Supreme Court of the State of Illinois on February 14, 1936, in *Peoples vs. United Medical Service, Inc.*, construed the Business Corporation Act of Illinois not to authorize a corporation to engage in the practice of medicine. The act authorizes the formation of a corporation for "any lawful purpose."

This case turns upon the important question as to what constitutes the practice of medicine by a corporation. The corporation earnestly contended that it was not engaged in the practice of medicine. It owned a clinic and maintained offices where the treatment of disease was engaged in solely by licensed and registered physicians and surgeons employed by the corporation. The corporation received the fees charged the patients.

The Illinois Supreme Court holds that the practice of a profession is not subject to commercialization or exploitation, and "requires something more than the financial ability to hire competent persons to do the actual work. It can be done only by a duly qualified human being, and to qualify something more than mere knowledge and skill is essential. No corporation can qualify."

This same question has appeared in other forms and the decisions in the various states are not uniform, as is pointed out in the opinion of the Illinois Supreme Court. The form in which the question most frequently appears is where a hospital incorporates and furnishes medical care and attention as part of the service for which it makes a charge. In the Illinois case one of the purposes of the corporation was "the promotion of individual and public health through the study, prevention and treatment of disease." That is, the corporation assumed to give the treatment of disease itself according to the terms of its Articles of Incorporation. It defended on the ground, however, that it was hiring licensed physicians who carried out the treatment. There may be a distinction without a difference between the manner in which this corporation organized and was operating, and the manner in which a hospital is organized and operated, in that the hospital may be organized only to procure the physician to act upon his own responsibility not as a servant of the hospital but as an independent contractor.

At any rate Judge Cardozo, while a member of the Court of Appeals of New York, in *Schoendorff vs. New York Hospital Society*, 105 N. E. 92, said in the course of an opinion that involved the ques-

tion as to whether a hospital was practicing medicine, "The relation between a hospital and its physicians is not that of master and servant. The hospital does not undertake to act through them, but merely to procure them to act upon their own responsibility." He quotes in support of that statement from an English case which he adopts as part of his opinion the following excerpt:

"It is, in my opinion, impossible to contend that Mr. Lockwood, the surgeon, or the acting assistant surgeon, or the acting house surgeon, or the administrator of anesthetics, or any of them, were servants in the proper sense of the word; they are all professional men, employed by the defendants to exercise their profession to the best of their abilities according to their own discretion; but in exercising it they are in no way under the orders or bound to obey the directions of the defendants."

The Supreme Court of Rhode Island followed the same rule as that discussed by Judge Cardozo.

The courts are in complete agreement that a corporation has no power to carry on the practice of one of the learned professions. The point in which the confusion is introduced in the decisions of the court is in their attempt to determine when corporations are attempting to practice one of the learned professions.

These questions have received much attention in recent years in connection with various business enterprises that have been organized as corporations through which services are rendered that formerly were performed only by individuals. Among the lawyers the questions arise in connection with trust companies, corporation service companies, and collection agencies; among the physicians, with hospitals and clinics. The tendency seems to be toward the limitation of the right of a corporation to occupy the place where it may procure the professional services for another by regarding such activity as the performance of the professional service by the corporation itself through an employe who is answerable to the corporation and not to the person for whom the services are rendered—and this the law condemns.

#### INDIANA DIVISION OF PUBLIC HEALTH BUREAU OF COMMUNICABLE DISEASES

Monthly Report, April, 1936

Diseases	April, 1936	March, 1936	February, 1936	April, 1935	April, 1934
Tuberculosis	215	142	111	225	84
Chickenpox	218	263	304	497	395
Measles	105	47	92	1,819	3,953
Scarlet Fever	1,235	1,187	1,460	724	721
Smallpox	16	22	3	9	2
Typhoid Fever	4	5	13	2	28
Whooping Cough	165	162	137	335	413
Diphtheria	47	68	136	75	68
Influenza	378	222	181	144	73
Pneumonia	202	80	165	124	31
Mumps	407	372	303	109	50
Poliomyelitis	1	0	0	1	1
Meningitis	23	18	12	24	6
Vincent's Angina	0	0	0	1	0
Encephalitis	0	0	2	4	1
Ophthalmia Neonatorum	0	0	0	0	1

## DIPHTHERIA DEATHS IN APRIL, 1936

The number of deaths from diphtheria in Indiana is reduced to eight for the month of April. However, this is still much too high, for it is the highest rate for the month of April since 1932. There was only one adult death, the remainder being ten years of age or under. Three were one year of age; two were five years of age; and two were of school age. This emphasizes the plea that we made last month for complete immunization.

The distribution of deaths by counties for the month of April, and for the period of the year, is given in the table below:

County	No. for Month April, 1936	No. for Year 1936
Allen	0	2
Brown	0	3
Cass	0	1
Clark	0	1
Delaware	0	1
Dubois	0	1
Elkhart	0	2
Grant	0	1
Greene	0	2
Howard	0	2
Jennings	0	1
Knox	0	1
Lake	2	3
Lawrence	0	2
Madison	0	4
Marion	3	9
Martin	0	1
Monroe	1	1
Montgomery	2	3
Owen	0	1
Parke	0	2
Pike	0	1
Ripley	0	1
Saint Joseph	0	2
Tippecanoe	0	3
Vanderburgh	0	3
Vigo	0	1
Warren	0	1
Washington	0	1
Total	8	57

Diphtheria Prevention Committee,  
THURMAN B. RICE, M.D., Chairman.

## SECRETARIES' COLUMN

The weather and the auditorium in Kansas City were ideal for the meeting of the A. M. A. Getting a room was a little difficult, but everyone had a decent place to sleep.

The auditorium is a beautiful structure with plenty of room for the exhibits and scientific sessions. The scientific exhibits were the best and most instructive I have ever seen at one of these meetings. Tons of samples were carried away.

Tom, Davy, Homer, Roscoe, and Don were on the job all the time. The way these boys worked was a shame. This delegate business is no picnic. They were dignified and busy all the time with the business of state.

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Mr. Secretary, the nominations are over. An election is yet to be held. Don't forget you have a duty to perform before election day in November. Now is the time to get busy. DON'T PUT IT OFF!

\* \* \*

You know there will come a day when every doctor will want to have the privilege of taking life easy. Wouldn't it be nice if some way could be found in connection with your medical society membership to receive annuity at about age 50? Suggestions are in order.

\* \* \*

Have you studied the plan of the State Social Security Act as published in the last issue of the State JOURNAL? Do you know all about the Welfare Board in your county? Do you know the Federal government has allotted \$1,111,575 to Indiana to match state aid to aged needy, needy blind, and dependent children for the period April 1 to June 30? Do you know and does your society know the provisions of the Federal Social Security Act if you employ any office help? Better study this and inform your members.

\* \* \*

The fracture demonstrations at Kansas City were very fine and well attended. The motion picture in colors of operations on the eye were excellent. The exhibit on peritonitis was worth any one's time. The diabetic exhibit was very complete. The most unique exhibit to me was the exhibit showing the action of the heart in health and disease. Drs. Levine and Lerhner did a fine job on this subject.

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It will soon be the good old summer time. Summer time means vacations. Vacations mean a longer time in this world. A longer time in this world means that we will have more time to enjoy the good things. Plan now to get the most out of life. TAKE A VACATION.

## DEATH NOTICES

**WELLS M. OSBORN**, M.D., of Indianapolis, died February 4, aged sixty-one years. Dr. Osborn graduated from the Chicago Homeopathic Medical College in 1899.

**ORRIS E. LETT**, M.D., of Montgomery, died April twelfth, aged sixty-four years. Dr. Lett had been in ill health for more than a year. For many years, Dr. Lett was a member of the Daviess-Martin County Medical Society, the Indiana State Medical Association, and the American Medical Association. He graduated from the Kentucky School of Medicine, Louisville, in 1901.

**BERT P. McWHINNEY**, M.D., of Indianapolis, died April fourteenth, aged sixty-seven years. Dr. McWhinney graduated from the Eclectic Medical College, Cincinnati, in 1897.

**CLARK E. FARABEE**, M.D., of Indianapolis, died April fourteenth, aged eighty-nine years. Dr. Farabee practiced medicine in Danville for twenty-one years, moving to Indianapolis in 1903. He retired from practice several years ago. He graduated from the Medical College of Indiana, Indianapolis, in 1880.

**ARTHUR E. GRAVES**, M.D., of New Waverly, died April twenty-seventh in a Detroit hospital. Dr. Graves was for many years a member of the Cass County Medical Society, the Indiana State Medical Association and the American Medical Association. He graduated from Rush Medical College, Chicago, in 1884.

**ZERI H. FODREA**, M.D., of Westfield, died April twenty-second, aged seventy-nine years. Dr. Fodrea had served as president of the Hamilton County Medical Society, and was an honorary member of the Hamilton County Medical Society and the Indiana State Medical Association. He had practiced in Westfield forty-seven years. He graduated from the University of Michigan Medical School at Ann Arbor in 1888.

**L. L. QUICK**, M.D., of New Waverly, died April twenty-fifth, aged eighty-nine years. Dr. Quick had practiced in New Waverly more than fifty years, and had been a resident there for eighty-

one years. He was a Civil War veteran. Dr. Quick graduated from the Indiana Medical College, Indianapolis, in 1879.

**JAMES HARVEY FERGUSON**, M.D., of Kempton, died in an Indianapolis hospital, May twelfth, aged sixty-six years. He graduated from the Medical College of Indiana, Indianapolis, in 1902.

**HORACE M. EVANS**, M.D., of Indianapolis, died May twelfth, aged seventy-six years. Dr. Evans was a former president of Valparaiso University, and had lived in Valparaiso most of his life, coming to Indianapolis three years ago when he was appointed to the State Industrial Board. For many years he was a member of the Porter County Medical Society, the Indiana State Medical Association and the American Medical Association. He graduated from Northwestern University Medical School, Chicago, in 1892.

**JOHN M. FOUTS**, M.D., of Richmond, died May tenth, aged sixty-four years. Dr. Fouts practiced in Centerville before locating in Richmond about twenty years ago. He had served as Wayne County Health officer from 1930 to 1934. Dr. Fouts was a member of the Wayne County Medical Society, the Indiana State Medical Association and the American Medical Association. He graduated from the Central College of P. and S., Indianapolis, in 1898.

**NATHANIEL C. HAMILTON**, M.D., retired physician of Kokomo, died May sixteenth, aged sixty-two years. He graduated from the Miami Medical College, Cincinnati, in 1900.

**JOHN J. PARKER**, M.D., of Merom, died suddenly, May eighteenth. Dr. Parker was sixty-three years old. He was secretary of the Merom board of health and a member of the Sullivan alcoholic beverage control board. He was a member of the Sullivan County Medical Society, the Indiana State Medical Association and the American Medical Association. He graduated from Kentucky University Medical Department, Louisville, in 1900.

**FRED A. LAMPMAN**, M.D., of Elkhart, died May fifteenth, aged fifty years. Dr. Lampman had practiced in Elkhart for the past nine years. He was a member of the Elkhart County Medical Society, the Indiana State Medical Association, and a Fellow of the American Medical Association. He graduated from Indiana University School of Medical in 1917.

## HOOSIER NOTES

Miss Edith Anne Hoopingarner, of Indianapolis, and Dr. Glen Ward Lee, of Anderson, were married in Indianapolis, May ninth. Dr. Lee is an interne at the Indianapolis Methodist Hospital.

Miss Mildred Ruth Long and Dr. Herman T. Combs, both of Evansville, were married, May twelfth.

Dr. Fred C. Denny has located at Greensburg in the office of the late Dr. D. W. Weaver.

Dr. George R. Clayton, of Monon, celebrated his eighty-second birthday, April twentieth, by taking a business trip to Chicago.

The fifteenth annual "Wabash River Cat Fish Dinner" of the Fountain-Warren County Medical Society will be held at Covington, June fourth.

Dr. and Mrs. H. K. Langdon, of Indianapolis, recently returned from a three and one-half months' vacation in Arizona.

Dr. M. B. Catlett of Fort Wayne has been appointed to the Fort Wayne Board of Public Health to succeed Dr. Joseph C. Lill who has resigned.

The annual dinner meeting of the Fort Wayne Academy of Medicine and Surgery was held May twenty-sixth.

Dr. M. H. Flinter has moved from Gary to the White County Trust Building in Monticello, Indiana.

Dr. G. T. Beckett, who has been practicing in Indianapolis, has moved to Arlington, Indiana.

Miss Carroll Duncan of Evansville and Dr. Charles F. Leich of Evansville were married in Indianapolis, April twenty-fifth.

Dr. William F. Molt, of Indianapolis, attended the meeting of the American Bronchoscopic, the American Laryngoscopic and the American Otological Societies which were held in Detroit, Michigan, from May 24th to May 30th.

Dr. M. A. Austin of Anderson talked on "Social Security" before the members of the Anderson Business and Professional Women's Club, April sixteenth.

Work has been started on a \$60,000 annex to the Freeman-Greene County Hospital at Linton. The improvement is made possible through a Public Works Administration loan.

Dr. W. D. Gatch, dean of the Indiana University School of Medicine, addressed Rotarians in Indianapolis, May fifth, his subject being "The Riley Hospital Child."

The Business and Professional Woman's Club of Connersville has purchased a gas and ether machine for the Fayette Memorial Hospital. The machine cost \$500.

L. B. McCracken, director of the Indianapolis Medical and Dental Bureau, addressed members of the Tristate Hospital Association at the annual convention in Chicago, May seventh.

Dr. E. E. Padgett of Indianapolis was one of the principal speakers at the spring meeting of the Putnam County Federation of Clubs, April fourteenth, in Greencastle. Dr. Padgett's subject was "The Socialization of Medicine."

As part of the observance of National Hospital Day, the new thirty-five bed contagious ward of the Indianapolis City Hospital was dedicated. The ward has been reconditioned and equipped by Eli Lilly and Company.

Dr. William M. Mount, of Rochester, Minnesota, and Miss Muriel Millet, of Indianapolis, were married in Indianapolis, May fifth. Dr. Mount is the son of Dr. and Mrs. W. C. Mount, of Kirklin, Indiana.

Dr. William McQueen has resigned as superintendent and medical director of Sunnyside, the Marion County Tuberculosis Hospital. He has been associated with the hospital for sixteen years. The resignation becomes effective June first.

A bond issue of \$265,000 was sold to the City Securities Corporation of Indianapolis, April twenty-seventh, by the Indiana University trustees. Proceeds of the bonds will be used to finance construction of the new medical unit at Bloomington.

The thirty-second annual reunion dinner of the 1904 class of the Medical College of Indiana was held at the Columbia Club in Indianapolis, April twenty-second. There were originally eighty-nine members in the class. Of the fifty-eight now living, twenty-nine attended the banquet.

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"What the Social Security Program Will Mean to the Health Program in Indiana" was the subject of a talk presented by Dr. Howard B. Mettel, of Indianapolis, at a public meeting in Muncie, May eighth. Dr. Mettel is the director of Indiana's new Bureau of Maternal and Child Health.

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The Evansville Post-Graduate Group held the sixth and last of its series of meetings April 28, at the Vendome Hotel. Dr. Thomas R. Gittens of Sioux City, Iowa, talked on "Differential Diagnosis of Headaches" with special reference to the periodic and allergic types.

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The first international conference on fever therapy will be held at Columbia University, New York City, September 29 to October 3, 1936. Information regarding the conference may be secured from the secretary, Dr. William Bierman, 471 Park Avenue, New York City.

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The annual spring meeting of the Indiana Dietetic Association was held May sixteenth in Indianapolis. Speakers included Dr. C. L. Rude-sill of Indianapolis whose subject was "Progress in Treatment of Diabetes," and Dr. G. C. Timmons, Indianapolis dentist, whose subject was "Education and Demonstrative Programs in Dentistry Fields."

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Dr. William J. Mayo, of Rochester, Minnesota, will give the commencement address at the ninety-second commencement exercises of Notre Dame, June seventh. Honorary degrees will be conferred upon Dr. William J. Mayo, Dr. Charles H. Mayo, the Rev. Edward F. Mooney, bishop of Rochester, N. Y., and Francis P. Garvan, of New York City, attorney and founder of the Chemical Foundation of New York.

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The twenty-fifth annual meeting of the Indiana Tuberculosis Association was held in Indianapolis, in April. Murray A. Auerbach, executive secretary, reported that 426 visits were made to counties in the interests of the health campaign, and that 126 addresses were given. Clinics were conducted in 47 counties. The announcement was made that Indiana showed an increase of more than 20 percent in the Christmas seal sale.

Physicians attached to numerous General Motors Corporation plants attended a conference held at the Delco-Remy plant in Anderson, May seventh and eighth. This was the first national conference arranged by the medical men of the General Motors units, and Anderson was selected as the meeting place because the Delco-Remy plant has one of the best equipped hospitals and laboratories of any of the units in the industry. Dr. F. B. Wishard, of Anderson, assisted in arranging the two-day meeting.

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Dr. William Niles Wishard and Dr. Charles E. Ferguson, of Indianapolis, were honored at a dinner given by Pi chapter of Phi Rho Sigma at the Indianapolis Athletic Club, April twenty-ninth. Dr. Wishard, who has been head of the department of genito-urinary surgery of the Indiana University School of Medicine since 1887, and Dr. Ferguson, professor emeritus of obstetrics at the school, were praised by speakers as "representative of the highest ideals of our profession and a source of inestimable inspiration." Dr. Wishard and Dr. Ferguson are the oldest alumni of the local chapter. Dr. Wishard, 84, is an active practitioner; Dr. Ferguson, 80, has retired.

#### AUXILIARIES

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The Auxiliary to the Floyd County Medical Society met in New Albany, May first, for a luncheon meeting.

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As a memorial to physicians who have served in the Indianapolis City Hospital, a Memory Lane of elm trees has been started on the hospital grounds by the Woman's Auxiliary of the Indianapolis Medical Society.

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The Auxiliary to the Vigo County Medical Society has elected the following officers: Mrs. E. O. Nay, president; Mrs. William Kunkler, first vice-president; Mrs. J. E. Freed, second vice-president; Mrs. Ernest L. Mattox, secretary, and Mrs. W. D. Asbury, treasurer.

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The Auxiliary to the Madison County Medical Society held its monthly social meeting, April twentieth, in Anderson. Mrs. R. L. Compton of Richmond, president of the state auxiliary, was guest speaker. Mrs. E. E. Hunt of Pendleton gave a talk on "Cosmetics."

## INDIANA UNIVERSITY NEWS NOTES

The general contract for construction of a new medical building at Indiana University was awarded to Leslie Colvin, of Indianapolis, on his bid of \$267,225. Subcontracts for the building, which will be financed partially with PWA funds, have been awarded. A. M. Strauss, of Fort Wayne, is the architect.

A collection of medical memorabilia which Dean W. D. Gatch considers a very important addition to the Indiana University medical museum has been given by an anonymous donor. The collection includes an especially valuable volume of the original notes of lectures made by Dr. Robert Cravens, of Madison, when he sat in the lecture rooms of some of the most eminent early American surgeons at the University of Pennsylvania in 1815-16.

Dr. Cravens' original notes cover surgical lectures by Dr. Philip Syng Physick and Dr. John Syng Dorsey, who were perhaps the most prominent American surgeons of their day. Dr. Physick performed an operation on Chief Justice John Marshall, of the U. S. Supreme Court, and Dr. Dorsey was the author of the first American textbook of anatomy. Lecture notes of the early period are very rare, particularly those of lectures by men so famous in the annals of American medicine as Dr. Physick and Dr. Dorsey. Dr. Cravens' papers are also of interest and value because of their local, historical association.

"Philadelphia was one of the chief centers of medical knowledge in America," said Allan Hendricks, librarian of the I. U. medical school, "and the University of Pennsylvania school of medicine, with its predecessor, the medical department of the College of Philadelphia, was the first school in the United States to grant a medical diploma following a course of study. It is now the oldest medical school in the country. At the time of Dr. Cravens' attendance, 1815-16, it occupied a building erected by the State of Pennsylvania in 1792 at Ninth and Chestnut streets, Philadelphia, as a home for the President of the United States, when Philadelphia was the capital of the nation and George Washington was the President."

The collection which has come to our museum after passing through several ownerships, includes also original papers in connection with Dr. Cravens' attendance at lectures on anatomy by Dr. Caspar Wister, who published the first American System of Anatomy; Lectures on *Materia Medica* by Dr. Nathaniel Chapman, a very prominent figure in American medicine as educator, author, editor and practitioner; lectures on surgery by Dr. Physick and Dr. Dorsey, and those on midwifery and the diseases of women and children by Dr. Thomas Chalfley James, the foremost obstetrician of his

period, who had received his medical education in London and Edinburgh at a time when the practice of obstetrics was rather a novelty in America. Original signatures of the lectures are included in the Cravens' collection. Another item of interest is a notebook containing 'a short and concise abridgement of the System of Anatomy.' This synopsis was prepared by Dr. Joseph W. Lanier, of Madison, from the recognized anatomical works of his time, and is in his handwriting. Dr. Lanier died in 1834.

"The round, clear deliberate penmanship which Dr. Cravens used is suggestive of more leisurely days when penmanship was a fine art. The list of clothing in the back of the notebook, evidently that clothing which he took with him to Philadelphia; a list of Dr. Cravens' medical and other books; and also the statements of payments made to his landlord, all show the care and exactitude of an earnest and careful life. The notebook also contains the office accounts of Dr. Cravens for the period 1817 to 1820, which show that his practice, upon his return from school to what was then the metropolis of Indiana, included many of the most prominent of the citizens."

"Dr. Cravens enrolled in the University of Pennsylvania from Harrisonburg, Virginia, and then settled in Madison. He died in 1821."

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The following students at Indiana University have been elected to membership in the Phi Beta Pi professional medical fraternity: Robert Rang, Washington; James Schornich, Wabash; Emory Hamilton, Kendallville; Sterling Hoffman, Fort Wayne; Walter Peleczar, Hobart; Philip Grillo, Gary; Paul Thompson, Indianapolis; William Van Ness, Summitville; John Stepleton, Vevay.

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Dr. Gerald E. Timmons, secretary of the Indiana University School of Dentistry, has been appointed consultant for the educational policies commission in Washington, under the direction of the department of superintendence of the National Education Association. The purpose of the commission is to develop long-range planning for the improvement of American schools. Through its consultants, representative leaders in various civic and educational fields, the commission's policies are formed.

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Robert D. Turner, Andrew W. Brenner, William M. Cockrum, Herbert T. Wagner, John Madison Thompson, Harvey E. White, Gilson Hild, Herman Lowell Watson, Gerald Shorts and Joseph E. Walther, all of whom will receive the doctor of medicine degree from Indiana University in June, have been awarded internships in the Methodist Hospital, Indianapolis, according to the announcement of Dr. John G. Benson, general superintendent of the hospital.

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Dean Frederick Rich Henshaw has announced his retirement this month from a 41-year private practice in dentistry to devote his full time to

teaching and research at the Indiana University School of Dentistry, Indianapolis.

He will become director of a children's clinic which will be opened in the new dental building next fall, under a cooperative arrangement between the U. S. Public Health Service and the University. The Federal government will equip the clinic at the dental school with fifteen of the latest and most modern units known to dental science during the summer so that advanced research may begin next fall.

Plans for making Indianapolis a national center for research in children's dental diseases are the result of negotiations between Colonel Clinton T. Messner, chief dental surgeon of the U. S. Public Health Service at Washington, and Dean Henshaw.

So definite did Dean Henshaw regard the need for the children's clinic that he incorporated plans for it in the new dental school building when it was constructed three years ago. A large room, 60 feet long, with the desired north exposure, was placed on the second floor of the building and this is the room which will be used as the children's clinic. Adjoining rooms will be used as research laboratories in connection with the clinic.

Under the plan adopted by the Public Health Service and the University, the publications of the clinic will be issued jointly. Reports of research will be made available as it develops for the use and guidance of practicing dentists in their preventive and corrective work in the dental diseases of children.

While responsibility for research will rest with the faculty of the dental school, Dean Henshaw said that specialists from the U. S. Public Health Service are expected to be assigned to the medical center here from time to time for observation and assistance in the work being done. Dean Henshaw pointed out that one of the main reasons for the selection of Indianapolis as the center for research in children's diseases was the fact that the full resources of the James Whitcomb Riley Hospital for Children could be utilized in conjunction with the dental clinic. The hospital offers a wide choice among thousands of child patients annually for selected cases for study.

Colonel Messner is a graduate of the I. U. School of Dentistry, of the class of 1908. He has known at first hand of the growth and development of the dental school and medical center and of the facilities provided for study of a wide variety of children's dental diseases. Colonel Messner is a native of Boswell, Ind. He entered the U. S. Public Health Service following graduation from I. U. and has risen to the position of chief of the dental division.

"The cooperative project, now being instituted in the Indiana University School of Dentistry, between the U. S. Public Health Service and the School of Dentistry, marks an epoch in the study of dentistry for children," Dean Henshaw said.

"All the resources of the James Whitcomb Riley

Hospital for Children as well as the resources of the medical school and the other hospitals of the medical center, will be available for study and research in a variety of problems concerned in pathology, growth and development, repair and prevention in this broad field.

"The selection of Indiana University as the site for this important work is, indeed, a very high compliment to the merits of the institution."

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Joseph W. Freeman, of Syracuse, has been elected president of the Theta Kappa Psi professional medical fraternity at Indiana University. Other officers elected are: Paul V. Evans, Indianapolis, vice-president; A. Lee Hickman, Jr., Hammond, secretary, and C. E. Williams, Bloomington, treasurer.

## SOCIETIES — INSTITUTIONS

### COUNTY SOCIETY REPORTS

DELAWARE-BLACKFORD COUNTY MEDICAL SOCIETY met at the Hotel Roberts in Muncie, April twenty-eighth, with Dr. Hugh A. Cowing as principal speaker. Dr. Cowing talked on "The Progress of Surgery," presenting his surgical experiences of the 1890's and mentioning the changes in surgery during the past forty years, with particular emphasis upon acute appendicitis. Attendance numbered twenty-five.

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ELKHART COUNTY MEDICAL SOCIETY heard Dr. Bert Ellis, of Indianapolis, talk on "Management of Laryngeal Obstruction" at the May seventh meeting in Elkhart. This was the last meeting of the season for this society.

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FAYETTE - FRANKLIN COUNTY MEDICAL SOCIETY met at the McFarlan Hotel in Connersville, April fourteenth, to hear Dr. George Gareau, of Indianapolis, talk on "Treatment of Fractures." Attendance numbered seventeen.

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FORT WAYNE (ALLEN COUNTY) MEDICAL SOCIETY met in the Chamber of Commerce, Fort Wayne, April twenty-first, with forty-five members and six guests present. Dr. John Lundy, of the Mayo Clinic, presented an address on "The Relationship of Preliminary Medication to Anesthesia."

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FORT WAYNE MEDICAL SOCIETY met in the Chamber of Commerce, May fifth, with thirty-eight in attendance. The meeting was devoted to discussion of changes in the constitution and by-laws of the society. A board of trustees was created, and nominations for officers for next year were made.

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FOUNTAIN-WARREN COUNTY MEDICAL SOCIETY met at Perrysville, May seventh, with Dr. W. D. Little, of Indianapolis, as principal speaker. His subject was "Gall Stones and Infection of the Biliary Tract." Attendance numbered forty-five.

The fifteenth annual "Wabash River Cat Fish Dinner" will be held at Covington, June fourth.

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GRANT COUNTY MEDICAL SOCIETY held a meeting at the Spencer Hotel in Marion, April twenty-third. Dr. Edgar F. Kiser, of Indianapolis, spoke on "Errors in the Diagnosis of Cardio Vascular Disease." Thirty-seven members and ten guests attended.

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GREENE COUNTY MEDICAL SOCIETY members were addressed by Dr. Goethe Link, of Indianapolis, April sixteenth. Dr. Link's subject was "Goiter." The meeting was held at the Freeman-Greene County Hospital.

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HAMILTON COUNTY MEDICAL SOCIETY met in Noblesville, April fourteenth. Dr. C. O. McCormick, of Indianapolis, presented moving pictures showing analgesia in labor. Attendance numbered twenty-two.

\* \* \*

HENRY COUNTY MEDICAL SOCIETY members met at the Henry County Hospital, April sixteenth. The principal speaker was Dr. C. J. Clark, of Indianapolis, who talked on "Valvular Heart Disease and Electrocardiograms." Attendance numbered eighteen.

\* \* \*

INDIANAPOLIS MEDICAL SOCIETY devoted the evening of April twenty-first to a study of the medical-legal aspects of cases coming under the jurisdiction of the Industrial Board. Speakers\* were Mr. James V. Donadio, Dr. Rogers Smith, Dr. E. Vernon Hahn, and Mr. Edgar A. Perkins. This was a dinner meeting at the Indianapolis Athletic Club.

At the April twenty-eighth meeting, held at the Athenaeum, the program was devoted to a consideration of the Hemorrhagic Diatheses. Papers were presented by Dr. Charles P. Emerson and Dr. Fred E. Gifford; discussion was opened by Drs. Vincent Lapenta and Will Shimer.

At the Athenaeum, May fifth, Drs. D. O. Kearby and Marlow Manion talked on "Economic and Social Cost of Lye Burns of the Esophagus," and Dr. H. R. Allen presented a paper on "Progress Made in Treating Fractures." Dr. Allen's paper was discussed by Drs. L. A. Ensminger and L. L. Shuler.

"Care of Poliomyelitis During the First Two Years of the Disease," was the subject presented by Dr. William V. Wood at the May twelfth meeting of the Indianapolis Medical Society. Dr. Russell Hippenstein presented a paper on "Discussion of the Commoner Forms of Baby Foods and Feeding," and Dr. Henry Mertz talked on "Mumps and Orchitis."

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JASPER-NEWTON COUNTY MEDICAL SOCIETY members met at the White House Hotel in Morocco, April thirteenth, with Dr. G. D. Larrison as host. This was a dinner meeting. Dr. Rollin H. Moser, of Indianapolis, was the principal speaker, his subject being "Therapy of Ulcer." Eleven members and two guests were present.

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JAY COUNTY MEDICAL SOCIETY met at the Portland Country Club, May first. Dr. Robert L. Glass, of Indianapolis, presented a paper on "Head Injuries."

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KNOX COUNTY MEDICAL SOCIETY members met in Vincennes, May fifth. Speakers were J. W. Graves, M.D., J. T. Gregory, D.D.S., and G. D. Timmons, D.D.S., all of Indianapolis. The subject was "The Role of Teeth as Foci of Infection." This was a joint meeting of the Knox County Medical and Dental Societies. Indiana's program in maternal and child health under the Social Security Act was discussed by Dr. J. F. Reilly, of Vincennes, and Dr. Timmons, of Indianapolis. Attendance numbered thirty-six.

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KNOX COUNTY MEDICAL SOCIETY met at the Jewel Cafe in Vincennes for a dinner meeting, April fourteenth. Dr. Thomas B. Noble, Jr., of Indianapolis, talked on "Cancer of the Breast and Alimentary Tract." Dr. H. D. McCormick, of Vincennes, presented a case report of cancer of the tongue. Attendance numbered twenty.

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LAPORTE COUNTY MEDICAL SOCIETY members met at the Spaulding Hotel in Michigan City, April twenty-third. Dr. Howard B. Mettel, director of the Division of Maternal and Child Health, explained the functions of the department and plans for its future operation.

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MADISON COUNTY MEDICAL SOCIETY members were entertained at dinner by the Sisters of St. Joseph at St. John's Hospital in Anderson, April twentieth. A paper on "The Abnormal Mind" was presented by Dr. Russell Olt.

\* These four papers will be published in an early issue of THE JOURNAL.

MIAMI COUNTY MEDICAL SOCIETY met in Peru, April twenty-fourth. A symposium on cardio-vascular diseases was presented by Drs. E. M. Van Buskirk, B. W. Rhamy, and H. L. Murdock, all of Fort Wayne.

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MONTGOMERY COUNTY MEDICAL SOCIETY met at the Culver Hospital, April twenty-third. Dr. W. D. Gatch, of Indianapolis, was the principal speaker. Attendance numbered twenty-eight.

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NORTHEASTERN INDIANA ACADEMY OF MEDICINE met at the Sacred Heart Hospital in Garrett, April twenty-third. Dr. Robert R. Dieterle, of Ann Arbor, Michigan, talked on "The Duty of the Practicing Physician Toward the Psycho-neurotic Patient." Dinner was served by the Sisters at the hospital.

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PUTNAM COUNTY MEDICAL SOCIETY met at the Putnam County Hospital in Greencastle, April fourteenth. Dr. John E. Owen, of Indianapolis, was the principal speaker, his subject being "Gall Bladder Diseases." Eleven attended the meeting.

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RANDOLPH COUNTY MEDICAL SOCIETY met at Winchester, April thirteenth for its regular monthly banquet meeting. Thomas Hendricks, of Indianapolis, executive secretary of the Indiana State Medical Association, talked about social security as it pertains to the medical profession. Other speakers were Dr. Ed Clark, Indianapolis, president-elect of the Indiana State Medical Association, and Dr. M. A. Austin, Anderson.

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ST. JOSEPH COUNTY MEDICAL SOCIETY met in South Bend, April twenty-eighth. Dr. C. M. Fish, of South Bend, talked on "Common Aspects of Ano-Rectal Diseases." Attendance numbered forty.

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TIPPECANOE COUNTY MEDICAL SOCIETY met in Lafayette, May twelfth, with Dr. Edwin N. Kime, of Indianapolis, as guest speaker. In the afternoon a clinic on tumors and cysts was conducted at St. Elizabeth Hospital. In the evening, Dr. Kime talked on "Prognosis of Cancer," with special reference to gradation and radio sensitivity.

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VANDERBURGH COUNTY MEDICAL SOCIETY met in Evansville, April fourteenth, with thirty in attendance. A symposium on cardiovascular disease was presented by Drs. Herman Baker, T. F. Reitz, and S. L. Johnson.

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WAYNE-UNION MEDICAL SOCIETY met at Richmond, May fourteenth, at the Richmond State Hospital, with Dr. Richard Schillinger as host. The program included papers on "Schizophrenia," by Dr. Mary Wickens; "Less Frequent Psychoses," by Dr. F. J. Klepfer; "Psychosis with Syphilitic Meningo-Encephalitis," by Dr. Zwick; and "Manic-Depressive Psychoses," by Dr. William R. Taylor.

## INDIANA STATE MEDICAL ASSOCIATION

### EXECUTIVE COMMITTEE

May 3, 1936.

Meeting called to order at 10:45 a. m.

Roll call showed the following present: C. A. Nafe, M.D., Chairman; H. H. Wheeler, M.D.; R. L. Sensenich, M. D.; E. D. Clark, M.D.; O. O. Alexander, M.D.; A. F. Weyerbacher, M. D.; Albert Stump, Attorney, and T. A. Hendricks, Executive Secretary.

### Membership Report

Number of members April 30, 1936	2,632
Number of members April 30, 1935	2,577
Gain over last year	55
Number of members Dec. 31, 1935	2,803

**Treasurer's Office**

Auditing Committee will be appointed by the President next month in order that a check-up on Association finances may be made in June.

**1936 Session at South Bend**

(1) The general scientific program has been filled with the exception of the selection of a banquet speaker. The delegates from the State Association to the A. M. A. are to invite the President-elect of the A. M. A. to be the guest of honor and the principal speaker at the banquet during the annual session of the State Association the evening of October 7.

(2) *Commercial Exhibit.* 26 spaces sold; 12 spaces to be sold.

(3) *Appointment of Committee on Constitutional Revisions.* Dr. Sensenich is to appoint this committee at the next meeting of the Executive Committee.

**Legislative, Legal and Social Security Matters**

(1) Article in THE JOURNAL on child health and maternity set-up called to the attention of the committee.

(2) *Crippled Children and Security Act.* (a) Appointment not yet made of physician to serve in a full-time capacity to take charge of the crippled children work under the provisions of the state welfare act.

(b) Report made by Dr. Sensenich that the Department of Labor desires the crippled children work to be under the direct supervision of a physician who shall be directly responsible to the welfare director and not to any social service worker. Dr. Sensenich brought back this word from Washington.

(c) *Orthopedic Hospitals.* Request has been made of the American Medical Association for a list of the orthopedic hospitals in Indiana which have been approved to take care of crippled children work under the new social security act.

(3) *Primaries and Candidates.*

(a) Questionnaire which was sent to Lake County candidates for the Legislature and report compiled from these questionnaires brought to the attention of the committee.

(b) Questionnaires upon congressional legislative candidates distributed by the Vigo County Medical Society brought to the attention of the committee.

(c) It is the opinion of the attorney of the Association that letters of information in regard to candidates sent to physicians are legal under the new state law concerning slates.

(4) *Pure Food and Drug Act Pending in Congress.* Dr. Sensenich made a report to the committee upon the Pure Food and Drug Act that is now pending in Congress. Letter also received from the New Jersey State Medical Society concerning this legislation.

**Socialization of Medicine**

(1) *Correspondence in Regard to Dr. Parran's Stand Upon the Socialization of Medicine.* This correspondence was brought to the attention of the committee. Letters received from Dr. Parran and Dr. West and telegram from Dr. Cullen, a member of the Board of Trustees of the A. M. A., all indicate that Dr. Parran is not in favor of the socialization of medicine.

(2) Report of Dr. A. M. Mitchell upon his trip to New York and talk with Mr. Albert Milbank concerning the policies of the Milbank Foundation in regard to the medical profession brought to the attention of the committee.

**Graduate Education Meeting**

(1) Dr. Sensenich, upon president's page in THE JOURNAL, makes certain comments and suggestions concerning continuation of this work in Indiana.

(2) *Policy for 1937.* Suggestion made by the President and President-elect that preparations be made immediately for the meeting next spring. The committee authorized the Presi-

dent-elect to choose his committee for 1937 to start work immediately upon next year's course.

Discussion held concerning the payment of registration fee and the erection of exhibits to defray the expenses of the meeting. It was suggested that the committee think this entire matter over and report back at its next meeting.

(3) *Kellogg Graduate Education Program in Michigan.* Material received from Michigan in regard to the Kellogg program reviewed by the committee. This material is to be turned over to the new Committee on Graduate Education when it is appointed.

**WPA and Indigent Sick Work**

(1) Report received from Dr. R. G. Tuck, medical director of Oakland County Emergency Relief Administration in Michigan. This is to be filed for further consideration when and if this subject is reopened in Indiana.

(2) *Analysis of Medical Poor Relief Costs in Indiana.* This material was turned over to Dr. Nafe for study. Dr. Sensenich is to make comment upon this in a future President's Page.

**Group Hospitalization**

(1) *Ball Memorial Hospital, Muncie.* Report made that any further move to try group hospitalization at Muncie at this time was being held up.

(2) *Lake County Situation.* Nothing new to report.

(3) Recapitulation of group hospitalization by L. B. McCracken, manager of the Medical and Dental Business Bureau, brought to the attention of the committee. This was prepared upon the request of the Executive Secretary and the committee suggested that Mr. McCracken's report be sent to the various members in order that it may be studied and brought to the attention of the committee at its next meeting.

**A. M. A. Meeting**

(1) Credentials sent to delegates.

(2) Official report of meeting to be prepared this year for THE JOURNAL by Dr. Don Cameron.

**State Board of Medical Registration and Examination**

Report made that doctors are acting in salaried positions as optometrists in optical chain stores.

**Report of Meeting with Dr. William Lowe Bryan**

Dr. Sensenich and Dr. Clark made a report to the committee upon the talk that was had with Dr. Bryan concerning the fact that a faculty member was advocating socialized medicine and concerning a change in the methods of selecting students for admission to the University School of Medicine.

**Unoccupied Hospital Beds for Tuberculosis Patients**

Suggestion has been made that hospitals might turn some of their unused space into tuberculosis wards. If such beds were available, it had been said that there would be no necessity of building a new tuberculosis hospital in the state. According to a letter received from Murray Auerbach, Executive Secretary of the Indiana Tuberculosis Association, such beds are not available and there is a real necessity for additional beds for tuberculosis patients.

**The Journal**

(1) The committee felt that the cost for cuts used in the pages advertising the postgraduate course should be borne by the Graduate Education Committee and not THE JOURNAL.

(2) The committee was divided as to its choice of light or heavy face headings on JOURNAL original articles. This matter was to be discussed further at the next meeting of the committee.

## BUREAU OF PUBLICITY

March 30, 1936.

Present: W. N. Wishard, M.D., Chairman; F. M. Gastineau, M.D.; E. Vernon Hahn, M.D., and T. A. Hendricks, Executive Secretary.

The release, "Physicians' Graduate Education Program," approved for publication in March 30 papers.

The release, "High Waters and Typhoid," approved for publication in April 6 papers.

## Report on medical meeting:

Feb. 24—Mooresville Woman's Club, Mooresville, Indiana.  
"Food Fads." (Fifty present.)

Letter, along with a formal resolution approved by a county medical society concerning the use of physicians' names in the newspapers in connection with individual cases of illness or accident, received by the Bureau. The Bureau instructed the secretary to write a letter to the proper officials of this county medical society, acknowledging receipt of the resolution and stating that the Bureau is aware of the attitude of some newspaper reporters concerning the use of physicians' names. If the name of a physician is used in the papers in connection with the individual cases with the knowledge of the physician, this is unethical. If this is done without the knowledge of the physician, of course he cannot be blamed. The Bureau subscribes to a state-wide clipping service and the Bureau is confident that in checking up in the future such objectionable notices as have appeared in the past will appear less frequently.

Letter received from a physician in regard to fee-splitting, which reads as follows:

"This note is not official. I mean by that, that the matter I wish to speak of has not been discussed in our medical society, neither have I been instructed to write to you or anyone about it, but some of us are of the opinion that the practice of fee-splitting, which seems to be a more common practice than any of us wish to admit, is doing more to undermine the moral fiber of the medical fraternity than newspaper publicity or many other evils which conflict with our principles of medical ethics. It seems hard to separate the idea of splitting fees from that of commercializing the practice of medicine, which I think all would agree to be wrong."

"We would be glad to know what the attitude of the Council of the Indiana State Medical Association is toward this practice. Does the Council regard it as a menace to be eliminated, or is it a thing to be tolerated with efforts at standardization, or is it something we can't do anything about?"

The Bureau answered as follows:

"The Bureau is heartily in accord with the statements contained in your informal note concerning fee-splitting. The Bureau has sought from time to time to get specific evidence concerning such cases and if and when it is supplied with such evidence, it will be very pleased to take up the matter directly with the officials of your county society.

"The Bureau of Publicity abhors fee-splitting and officially every medical organization in Indiana is committed against it. Such practice is contrary to the Constitution and By-Laws of the State Association and the Principles of Medical Ethics of the American Medical Association which is or should be the official authorized code of conduct of every member of the Indiana profession. The Bureau wholeheartedly approves of the interest you have taken in this matter and will appreciate any definite information giving names, details, etc., that you may be able to send to it."

The Bureau, after thoroughly considering the matter concerning real estate advertisement in connection with a clinic in the northern part of the state, finally disposed of the case with an official opinion of its disapproval. The Bureau instructed the secretary to send a copy of this official opinion to the secretary of the local medical society of which the physician had been a member.

Report upon Thirty-second Annual Congress on Medical Education, Medical Licensure and Hospitals, which was held

in Chicago on February 17 and 18, prepared by the physician who represented the Bureau, to appear in the April issue of THE JOURNAL of the State Association.

The Bureau forwarded a letter to the secretary and general manager of the American Medical Association which contained a question concerning the proposed distribution of professional announcements. The letter from this official of the American Medical Association concerning this question follows:

"Mr. Hendricks has asked me to send you a statement of my opinion concerning the proposed distribution of a professional announcement, a copy of which was attached to your letter addressed to Mr. Hendricks under date of March 1.

"I take pleasure in enclosing a copy of the Principles of Medical Ethics, in which you will find on pages 7 and 8 the section dealing with advertising, professional announcements, etc. You will observe that in the matter of professional announcements, much is left to local custom, which in a certain sense means that the official attitude of the local medical society should be respected and complied with. In some instances county medical societies have approved the issuance of professional cards or the insertion of such cards in local newspapers, while other county societies have withheld such approval. I suggest, therefore, that before distributing the cards to which you refer in your letter to Mr. Hendricks, you ascertain from the Board of Censors or from other official agencies of your own component county medical society what official action may already have been taken with respect to these matters, and that if no action has been taken, you consider the advisability of ascertaining what the position of the county society may be.

"There is another factor in the situation which I call to your attention, purely because of the nature of correspondence that has come to this office clearly indicating that, in many instances, rather intense professional animosities have been created because of arrangements entered into by a local physician with a physician of another community whereby the outside physician maintains office hours on a certain day of the week in another community other than that in which he resides. It is my purely personal opinion, offered for whatever you may consider it to be worth, that it will be well for you and your proposed associate to consider this phase of the matter carefully. I personally knew of one instance in which two very splendid physicians incurred the ill will of practically all of their professional associates because of an arrangement of this kind."

Article which appeared in the March issue of the *Indiana Parent-Teacher* entitled "Nutrition" approved by the Bureau.

One member of the Bureau is to present to the Bureau an outline of a yearbook which is to be distributed to the news-papers of the state by the Bureau of Publicity.

Letter received from the librarian of the Indiana University School of Medicine concerning articles written by Dr. W. W. Keen in regard to vivisection.

Copy of the March bulletin of the Indianapolis Better Business Bureau containing an announcement in regard to the drive of the Bureau which resulted in a number of optometrists discontinuing a "particularly vicious line of bait advertising" in which eye examinations were represented as being made free of charge, reviewed by the Bureau.

Letter received from The Hospital of the Rockefeller Institute for Medical Research, asking for information concerning rules of the Bureau of Publicity. The questions of the Institute and the answers of the Bureau follow:

"1. Is there a set of written rules according to which medical practice is conducted in your state?"

"The principles of medical ethics of the American Medical Association are the basis of any rulings that are written upon the subjects of ethics in medical practice here in this state."

"2. How can a copy of such rules be obtained?"

"A copy of the principles of medical ethics may be obtained from the American Medical Association. In general, the Bureau of Publicity is the official body which makes these rules or attempts to interpret the principles of medical ethics to apply to medical practice. For instance, the Bureau

of Publicity has adopted the following ruling in regard to radio broadcasting by physicians in the state:

"The Bureau has adopted a rule that no physician who is in private practice should have his name mentioned over the radio in connection with the Bureau of Publicity broadcasts, but the names of physicians holding public office and connected with public institutions may be mentioned over the radio, if they are not in private practice."

"3. What machinery is available for enforcement of any code of rules?"

"The only machinery that is available for the enforcement of any code of rules is censorship machinery set up by each local county medical society. According to the Constitution and By-Laws of the Indiana State Medical Association, each county medical society is the judge of the eligibility of its own membership. The Bureau can only suggest and give its official opinion in such cases. It does not have the power of enforcement."

Letters received from the Michigan State Medical Society and the St. Louis Medical Society asking for information concerning the work of the Bureau of Publicity. Detailed six-page reports were written to each of these organizations.

April 7, 1936.

Present: W. N. Wishard, M.D., Chairman; F. M. Gastineau, M.D., E. Vernon Hahn, M.D., and T. A. Hendricks, Executive Secretary.

The release, "Spring Tonics and Spring Fever," approved for publication in April 13 papers.

Letter received from the St. Louis Medical Society thanking the Bureau of Publicity for the detailed report sent to the president of that society, upon his request for information in regard to the method of procedure of the Bureau, and a detailed report of its work and the results.

Article which appeared in the April issue of the *Indiana Parent-Teacher* entitled "Nutrition," approved by the Bureau.

The Bureau instructed the Secretary to prepare a regular release upon Hospital Day which is on May 12.

Report made by a member of the Bureau upon the bulletins prepared by a life insurance company.

A member of the Bureau made a report upon the periodic health examination article entitled "Progress of the Periodic Health Examination," written by the director of the Bureau of Health and Public Instruction of the American Medical Association. The Secretary was instructed to prepare a release based upon this article.

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April 14, 1936.

Present: W. N. Wishard, M.D., Chairman; F. M. Gastineau, M.D., E. Vernon Hahn, M.D., and T. A. Hendricks, Executive Secretary.

The release "Spring Exercise," approved for publication in April 20 papers.

Letter was written by the Bureau in an attempt to locate the grave of Doctor Jonathan Richmond.

Letter received from the director of publicity of Indiana University in regard to a historical article that is to be written by the newspapers concerning the notebook of Robert Cravens. An article in regard to this notebook was published in the March issue of THE JOURNAL of the Indiana State Medical Association.

Letter received from the Executive Secretary of the Michigan State Medical Society thanking the Bureau of Publicity for the outline of the work of the Bureau which was sent to the Michigan Society at his request.

The suggestion of a member of the Bureau concerning an annual bulletin to be prepared by the Bureau of Publicity for newspaper editors review by the Bureau. The Bureau suggests that this member give further study and develop his idea in regard to this bulletin.

#### FIFTH DISTRICT MEDICAL SOCIETY VIGO COUNTY MEDICAL SOCIETY AESCULAPIAN SOCIETY OF WABASH VALLEY TERRE HAUTE ACADEMY OF MEDICINE

A joint meeting of the above-mentioned societies was held at the Hotel Deming in Terre Haute, May first. Addresses of welcome were given by Drs. W. E. Stewart, R. L. Sensenich, H. W. Bopp, E. H. Dowell, O. O. Alexander, and W. D. Asbury. Following dinner, Dr. George W. Crile, of Cleveland, Ohio, presented an address on "Genesis and Physical Treatment of Essential Hypertension."

#### TENTH DISTRICT MEDICAL SOCIETY

The Tenth District Medical Society met at the Elks' Club in Valparaiso, April twenty-ninth. Sidney A. Portis, M.D., of Chicago, discussed "Recent Advances in the Field of Gastro-Enterology." Cleveland J. White, M.D., of Chicago, talked on "Eczema." I. F. Volini, M.D., of Chicago, discussed "The Etiologic Diagnosis of Heart Disease." H. B. Mettel, M.D., of Indianapolis, discussed the plans of the new Indiana Bureau of Maternal and Child Health. In the evening, Dr. W. D. Gatch, of Indianapolis, presented a paper on "Cancer of the Breast."

New officers were elected as follows:

President, Ray Elledge, Hammond.  
Vice-President, W. A. Buchanan, Hammond.  
Secretary, H. L. Eggers, Hammond.

The next meeting of the Tenth District Society will be held in Hammond in October.

#### COUNCIL ON PHARMACY AND CHEMISTRY

In addition to the articles already enumerated, the following have been accepted by the Council on Pharmacy and Chemistry of the American Medical Association:

Robert A. Bernhard:

Saf-T-Top Tincture of Merthiolate 1:1000.

Diarsenol Co., Inc.:

Neodiarsenol 1.8 Gm. Ampoules.

Jensen-Salsbury Lab's., Inc.:

Botulinus Antitoxin (Human).

Lee Laboratories:

Diphtheria Toxoid, Alum Precipitated, Refined.

National Drug Co.:

Normal Horse Serum 10 cc. Ampule Vial;

Normal Horse Serum 100 cc. Cylinder with Intravenous Outfit.

Sharp & Dohme, Inc.:

Dextrose, U. S. P. (d-Glucose), 25 Gm., 50 cc. Ampoule (Unbuffered);

Dextrose, U. S. P. (d-Glucose), 25 Gm., 50 cc. Ampule (Buffered).

United States Standard Products Company:

Rabies Vaccine (Killed Virus) Semple (U. S. S. P. Co.) (25 per cent suspension) seven and fourteen vials packages.

Lederle Laboratories

Antidiarrheal Serum (Polyvalent) 20 cc. vial package.

Parke, Davis & Co.

Mapharsen

Ampoules Mapharsen 0.04 Gm.

Ampoules Mapharsen 0.06 Gm.

Ampoules Mapharsen 0.4 Gm.

Ampoules Mapharsen 0.6 Gm.

E. R. Squibb & Sons

Squibb Cod-Halibut Liver Oil

Winthrop Chemical Co., Inc.

Ampules Suprarenin Powder, 0.05 Gm.

The following product has been accepted for inclusion in the List of Articles and Brands Accepted by the Council But Not Described in N.N.R. (New and Nonofficial Remedies, 1935, p. 445):

The National Drug Co.

Smallpox Vaccine (Vaccine Virus)

**BOOKS****BOOKS RECEIVED**

**EXAMINATION OF THE PATIENT AND SYMPTOMATIC DIAGNOSIS.** By John Watts Murray, M.D. 1219 pages; 274 illustrations. Cloth. Price \$10.00. C. V. Mosby Company, St. Louis, 1936.

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**SYNOPSIS OF CLINICAL LABORATORY METHODS.** By W. E. Bray, B.A., M.D., professor of clinical pathology, University of Virginia; director of clinical laboratories, University of Virginia Hospital. 324 pages, with 32 text illustrations and 11 color plates. Flexible cloth. Price \$3.75. C. V. Mosby Company, St. Louis, 1936.

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**THE HARVEY LECTURES.** Delivered under the auspices of the Harvey Society of New York, 1934-1935, under the patronage of the New York Academy of Medicine. Series XXX. 270 pages, illustrated. Cloth. Price \$4.00. The Williams and Wilkins Company, Baltimore, 1936.

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**PARENTERAL THERAPY.** Reference Manual of Extra-Oral Medication for Physicians, Dentists, Pharmacists, Chemists, Biologists, Nurses, Medical Students, and Veterinarians. By Walton Forest Dutton, M.D., and George Burt Lake, M.D. 386 pages with 90 halftones and line engravings. Cloth. Price \$7.50. Charles C. Thomas, Springfield, Illinois, 1936.

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**DISEASES OF THE RESPIRATORY TRACT.** Clinical lectures of the Eighth Annual Graduate Fortnight of the New York Academy of Medicine. By 21 contributors. 418 pages with 56 illustrations. Cloth. Price \$5.50. W. B. Saunders Company, Philadelphia and London, 1936.

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**CLINICAL HEART DISEASE.** By Samuel A. Levine, M.D., Assistant Professor of Medicine, Harvard Medical School; Senior Associate in Medicine, Peter Bent Brigham Hospital, Boston. 415 pages with 97 illustrations. Cloth. Price \$5.50. W. B. Saunders Company, Philadelphia and London, 1936.

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**SURGICAL CLINICS OF NORTH AMERICA.** Chicago Number. February, 1936. Published serially, one number every other month. Volume 16, Number 1. 356 pages with 78 illustrations. Per clinic year, February, 1936, to December, 1936, paper, \$12.00; cloth, \$16.00. W. B. Saunders Company, Philadelphia and London, 1936.

**BOOKS REVIEWED**

**DISEASE AND DESTINY.** By Ralph H. Major, M.D. Preface by Logan Clendenning, M.D. 338 pages, illustrated. Cloth. Price \$3.50. D. Appleton-Century Company, Inc., New York, 1936.

With a board knowledge of the history of medicine and a facile pen, Dr. Major has written a very delightful volume on what he pleases to term "Disease and Destiny." He pictures graphically the effect that such epidemic diseases as the King's Evil, smallpox, yellow Jack, and syphilis which he terms "the worst plague of all," have had upon the history of the world. The style is light, and it is written in a vein that makes it equally delightful reading for the layman and the physician. It deserves a place on any library shelf.

\* \* \*

**DISEASES OF WOMEN.** By Harry Sturgeon Crossen, M.D., F.A.C.S., Professor Emeritus of Clinical Gynecology, Washington University School of Medicine; and Robert James Crossen, M.D., Instructor in Clinical Gynecology and Obstet-

rics, Washington University School of Medicine. Eighth edition, entirely revised and reset. 999 pages. Cloth. Price \$10.00. The C. V. Mosby Company, St. Louis, 1935.

Although this is a textbook arranged for teaching purposes, it contains the information that any one doing or interested in gynecology will want to have. This is the eighth edition of the popular work, the last appearing in 1930. Apparently none of the new material of value appearing during the intervening years has been overlooked. In the complete resetting and revising it was thought that the size of the book could be decreased by leaving out obsolete material, but the addition of the necessary new material made this impossible.

The book is rich in illustrations of microscopic sections of cancer tissues and the normal changes in the endometrium. The material used is chiefly from the pathological laboratory of the writers. The whole book is characterized by profuse and comprehensive illustrations, making it inviting to look at and easy to understand.

The book takes up all phases of gynecological examination and diagnosis, including differential diagnosis of neighboring conditions in the bowel and urinary bladder. It deals with medical treatment of gynecological conditions and the operations of repair of the perineum and the cervix. A chapter on "Invasion of the Peritoneal Cavity" deals with the general principles of abdominal surgery. Pre- and post-operative care are discussed together with complications. This should appeal to the practitioner not doing major surgery but who often has after care to do.

The material on endocrinology and the new physiology of reproduction has been thoroughly rewritten.

The final chapter is an important one on "Medicolegal Points in Gynecology."

\* \* \*

**PHYSIOLOGY OF LOVE.** By Paolo Mantegazza. Translated by Herbert Alexander. Introduction by Victor Robinson, M.D. 237 pages. Cloth. Price \$3.00. Eugenics Publishing Company, New York, 1936.

So much has been written on this subject in times past that there would appear to be little left unsaid, and in reading the above volume, translated from the Italian, such, indeed, appears to be the case, as nothing new is revealed. Merit resides in the work, however, in that the subject is handled with restraint and there are no words which possibly could offend the eye. The style of writing, too, is most unusual, approaching the lyrical, almost poetic. Several quite controversial thoughts are aired, passages open to argument in a broadly medical sense, also biologically and sociologically, for example: "Matrimony, as it is among us today, is a corrupt institution that must be thoroughly reformed in order to restore its natural dignity." "Marriage in contemporary society is the cruellest, most pitiless parody of faith and eternity." There are others in like vein. Readers will form, of course, their own opinions.

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**CLINICAL HEART DISEASE.** By Samuel A. Levine, M.D., Assistant Professor of Medicine, Harvard Medical School. 445 pages with 97 illustrations. Cloth. Price \$5.50. W. B. Saunders Company, Philadelphia and London, 1936.

Dr. Samuel A. Levine has been one of the most frequent and one of the most worthwhile contributors to the literature concerning diseases of the heart. He has now crystallized his broad knowledge and his wide experience in this book which is just off the Saunders' press. The reviewer knows no book of equal size which will give the general practitioner a more intelligent conception of our present knowledge of heart disease than does this work. While it is thoroughly scientific, it is not too technical, and presents the latest advances in cardiology in an easily understandable and readily appreciated manner. The book should be read and pondered by every earnest physician and will provide everything that the average man needs to know about diseases of the heart.

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## THE ENDOCRINE RELATIONSHIP TO THE ETIOLOGY OF CANCER

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Hammond

The investigation of the nature and etiology of malignant growths is easily the most fascinating subject in medical science today and is engaging the most attention from research workers all over the world. While many and various theories have been advanced and discarded, and numerous lines of attack have been found inadequate in their final analyses, the one point on which there seems to be universal agreement is that cancer is fundamentally a problem of growth and metabolism. There is no such thing as an autogenous malignant tumor. Knowledge of the true mechanism of growth and the factors governing it is the prime requisite in following the path of effective control of both normal and abnormal cellular tissue formation. It follows that every endocrine factor concerned with growth and metabolism is, therefore, involved in the problem of cancer. The same processes of cell decay and replacement metabolism are at work in malignant tumors as in normal tissue growth and replacement metabolism elsewhere in the body; but there is this important difference that, while in the normal processes growth is evidently controlled, in malignant tissue it is not. Consequently there may be and, as a matter of fact, there actually are different kinds of growth-stimulating substances, some of which may be elaborated within the body itself or may be introduced into it. Growth-stimulating substances produce hyperplasia of specific or unspecific tissues and according to circumstances such may become malignant. The metabolism of these growths apparently, at least to a considerable extent, depends upon hormonal mechanisms and the investigation of such hormonal governing factor or factors presents perhaps the most interesting phase in the most recent investigations concerning the nature of cancerous and other malignant tumors.

As physicians looking at malignant growths from the clinico-therapeutic aspect, surgery has been the most potent weapon in the past, but surgery deals with the effects rather than with causes; it does not concern itself with inhibiting the action of factors governing the abnormal growth. The therapeutics of malignant growths in the future may be more directly turned toward checking growth-stimulating factors.

The scope of this paper is to review some of the important work done within recent years in associating some endocrine secretions, particularly the pituitary anterior lobe hormone, with malignant disease, especially cancer. One of the outstanding phases of this work has been the demonstration that the chemical structure of certain cancer producing substances is identical with that of substances which are found normally in the animal body, particularly in the sex hormones; it has also been demonstrated that carcinogenetic phenomena are closely allied to those of estrus. The findings which will be referred to should prove interesting to those who have not had either the time or opportunity to follow the investigational development. While still purely in the theoretic stage and scarcely to be considered from the viewpoint of practical medicine, the newer findings open up entirely different vistas of the etiology of cancer.

Before dealing with the apparent carcinogenetic activity of the growth-stimulating hormone of the pituitary anterior lobe and of the estrin hormone, now admittedly dependent upon anterior pituitary secretion, it will be well to refer succinctly to certain phenomena observed from time to time in the past, the exact significance of which was not then comprehended, but which now can be directly connected with more recently discovered facts. A brief outline should include, first, some general observations correlating endocrine activities with malignant growths; second, the action of hormones upon experimentally produced tumors; third, the anterior pituitary lobe hormone growth-accelerating principle; fourth, the effect of removal of endocrine glands upon tumors. This should form a basis for consideration in more detail of the recent findings

directly connecting carcinogenesis with endocrine activities.

Finally, reference will be made to certain clinical attempts that have been made to apply the recently acquired knowledge to the therapeutics of cancer.

#### ENDOCRINE ACTIVITIES AND MALIGNANT GROWTHS

In 1928, Baker and Carrel<sup>1</sup> showed that peptic digests of the anterior pituitary produced proliferation of rat sarcoma cells in tissue cultures, one of the first observations to demonstrate that substances in the pituitary gland stimulated malignant cell growth. In 1931, Susman<sup>2</sup> confirmed findings by Zondek who had in the previous year found that in 15 per cent of the 118 cases of malignant disease studied by him, anterior pituitary hormone was present in the urine in sufficient amount to give a positive Zondek-Aschheim reaction in mice, a finding which established that in neoplastic disease in mice pituitary activity was notably increased. Susman himself investigated 230 pituitary glands, 30 of which were from cases of malignant disease and confirmed Zondek's findings. The histologic examinations of the pituitary in cancer cases suggested: (1) That the anterior lobe was over-active and was stimulating growth; (2) that lesions found in the pituitary posterior lobe affected the quality and quantity of posterior lobe secretion and that by so doing the assumed growth-retarding action of this secretion was rendered inadequate. Later, Zondek<sup>3</sup> and associates found that the administration of the pituitary hormones Prolan A and Prolan B retarded the development of Ehrlich cancer in mice, a finding which, however, was not confirmed by Gruhzit.<sup>4</sup>

As early as 1918, Carse<sup>5</sup> had injected pituitrin in cancer cases to raise the blood pressure and observed a notable clinical improvement. Also, in 1921, Norgate<sup>6</sup> injected pituitrin into the tumor in 36 cases of cancer and found that the growths were affected. But neither Carse nor Norgate suspected that the ductless glands played any important part in cancer.

With regard to endocrine glands other than the pituitary, Susman<sup>2</sup> found that the thyroid and parathyroid glands, which are closely associated with the phenomenon of growth metabolism, showed no changes which could be definitely associated with the disease in cancer cases.

From basal metabolism tests made by Moratti<sup>7</sup> in 24 patients with cancer of the breast, this author concluded that 80 per cent of his patients showed

<sup>1</sup> Baker, L., and Carrel, A. Effects of liver and pituitary digests on the proliferation of sarcomatous fibroblasts of the rat. *J. Exper. Med.*, XLVII: 371, 1928.

<sup>2</sup> Susman, W. Role of the pituitary in the Etiology of Cancer. *Brit. M. J.*, II: 794, Oct. 31, 1931.

<sup>3</sup> Zondek, H. and associates. *Klin. Wehnschr.*, XI: 1785, 1932.

<sup>4</sup> Gruhzit, O. M. *Arch. Pathol.*, XVI: 303, 1933.

<sup>5</sup> Carse, G. *Med. World*, X: No. 21, 1918.

<sup>6</sup> Norgate, J. H. *Brit. J. Surg.*, IX: 495, 1921.

<sup>7</sup> Moratti, A. Sui rapporti fra ghiandola tiroide e tumori. *Rivist. di path. sper.*, VII: 324, 1931.

evidence of thyroid activity and he thinks that such thyroid activity is an etiologic factor in the development of cancer. On the other hand Heindl and Trauner<sup>8</sup> found that the basal metabolism was normal in four of six patients with breast cancer and only slightly elevated in the other two. The basal metabolism is only much increased in cases of advanced cancer.

Regarding the pancreas, Susman examined it in 170 cases of malignant disease including 14 cases of cancer extrinsic to the pancreas. In all, except two, the islets of Langerhans were enlarged; in cancer there was apparently an increased demand for carbohydrate. Handel and Tadenuma<sup>9</sup> observed that transplanted rat tumors grew more rapidly when the recipients were fed insulin.

If we regard the liver as an organ of internal secretion, we find that several investigators, among whom were Maisin and Francois<sup>10</sup>, Taylor<sup>11</sup> and Watson<sup>12</sup>, found that liver feeding accelerated the growth of malignant tumors in rats and mice. Haddow<sup>13</sup> suggests that there is a relationship between the liver and the anterior pituitary and cites supporting references.

Judging from such available evidence, the endocrine glands, therefore, which seem especially involved in cancer are the pituitary (including the sex hormones dependent upon it), the pancreas and the liver.

#### ACTION OF HORMONES UPON EXPERIMENTALLY PRODUCED TUMORS

In experiments carried out by Moller<sup>14</sup>, 70 male mice bearing the Ehrlich carcinoma, which does not regress spontaneously in the strain used, were divided into two groups. Thirty received no treatment while 40 were given prolan daily. On the twenty-third day, when the animals were killed and their tumors removed and examined, those which had been given prolan injections were found to average but 0.22 Gm. in weight compared with 1.0 Gm. for the untreated animals. This finding confirmed similar findings reported earlier by Zondek and associates. All prolan-treated animals showed also enlargement of the generative organs.

Bischoff, Maxwell and Ullmann<sup>15</sup>, having pro-

<sup>8</sup> Heindl and Trauner. *Der Grundumsatz von Karkinomkranken. Mitt. a. d. geb. der Med. u. Chir.*, XL: 416, 1927.

<sup>9</sup> Handel, M. and Tadenuma. *Zeitschr. f. Krebsforsch.*, XXI: 288, 1924.

<sup>10</sup> Maisin, J. and Francois, A. Influence due régime alimentaire sur l'éclosion et l'évolution du cancer du goudron. *Ann. de Med.*, (Paris), XXIV: 455, 1928.

<sup>11</sup> Taylor, H. D. *Proc. Staff Mtg., Mayo Clinic*, III: 454, 1928.

<sup>12</sup> Watson, A. F. Tar carcinoma in mice maintained on diets supplemented with fresh liver. *Am. J. Cancer*, XIX: 389, 1933.

<sup>13</sup> Haddow, A. Liver in relation to normal and malignant growth. *Am. J. Cancer*, XXII: 308, Oct., 1934.

<sup>14</sup> Moller, H. Die Beziehungen Zwischen Hypophysenvorderlappen-hormone und Tumorwachstum. *Frankf. Zeitschr. f. Path.*, XLV: 571, 1933.

<sup>15</sup> Bischoff, F., Maxwell, L., and Ullmann, H. *Am. J. Cancer*, XXI: 329, 1934.

duced retardation of experimental tumors of the malignant type in animals by hypophysectomy, again obtained an acceleration of the growths by administering anterior pituitary hormone. Acceleration was also obtained in the same types of growths following retardation by extensive pituitary irradiation.

In the literature of recent years, I can find no other references to the effect of hormonal injections on experimentally produced tumors.

#### THE ANTERIOR PITUITARY GROWTH-ACCELERATING PRINCIPLE

The anterior pituitary hormone is known to be an accelerator of growth. As already stated, Susman suggests that the pituitary posterior lobe hormone retards growth and checks the growth accelerating action of the anterior pituitary hormone. Witherspoon<sup>16</sup>, in reviewing the subject, states that the fact that the anterior pituitary growth principle also plays an important part in the growth rate of malignant tumors in animals has been frequently demonstrated. But the important question, as Bischoff and associates point out, is whether the anterior lobe growth principle functions alone in accelerating tumor growth. It seems most probable that the growth principle of the anterior pituitary lobe is at the same time both a body and tumor growth accelerating factor. This will be considered in more detail later on.

#### EFFECT OF REMOVAL OF ENDOCRINE GLANDS UPON TUMORS

Max Reiss<sup>17</sup> found that hypophysectomy in rats inoculated with Jensen sarcoma retarded the growth of the tumors.

Bischoff and Maxwell<sup>18</sup> found that adrenalectomy, thyro-parathyroidectomy and castration did not significantly affect the growth of malignant tumors in rats, nor did splenectomy, adrenalectomy or castration abolish immunity in rats that had proved refractory to inoculation with sarcoma. Dodds<sup>19</sup> found that castration checked the growth of mammary cancer in young mice, but that it had no effect in checking animal sarcoma and skin cancer. It did not prevent the experimental production of cancer by carcinogenic agents such as tar.

With this short summary of the principal points known in relation to the association of hormones with malignant tumors, we can now proceed to a consideration of other matters having a significant bearing on this question.

<sup>16</sup> Witherspoon, J. T. The Estrogenic, Carcinogenic and Anterior Pituitary Growth Principles and Their Clinical Relation to Benign and Malignant Tumors. *Am. J. Obstet. & Gynec.*, XXXI: 173, Jan., 1936.

<sup>17</sup> Reiss, Max. Experimentelle Tumorstudien. *Mediz. Klinik*, XXIX: 1100, 1933.

<sup>18</sup> Dodds, E. C. The Hormones and Their Chemical Relations. *Lancet*, i: 987, May 12, 1934.

<sup>19</sup> Bischoff, F. and Maxwell, L. C. *J. Pharmacol. and Exper. Therap.*, XLVI: 51, 1932.

#### THE NATURE OF CARCINOGENETIC CHEMICAL COMPOUNDS

Based upon experimental and clinical knowledge, until recently cancer was considered as a pathologic condition arising principally from continuous local irritation of tissues and possibly, at least in some cases, associated with an hereditary predisposition to cancer in the individual attacked. While it was true that skin cancer could generally be produced by the continuous local application of certain substances, such as tar and soot; and that malignant tumors could be transplanted in animals; also that malignancy was specific as regards the type of tissue in which it developed; yet the basic etiologic facts underlying these phenomena were not known. The newer knowledge shows that the development of cancer has, at least as one of its principal factors, definite growth stimulating chemical substances.

From 1915 to 1918, Yamigiwa and Ischikawa<sup>20</sup> published several articles in which they demonstrated experimentally that applications of tar to the skin of rabbits resulted in an epitheliomatous condition. In 1918, Tsutsui<sup>21</sup> and, in 1921, Passey<sup>22</sup> confirmed these results with both tar and soot. It was first assumed that tar acted by producing a chronic irritation which later became subject to malignant changes. But it was found that not all tars caused malignant changes. In 1921, Block and Dreifuss<sup>23</sup> found that the compounds present in certain tars responsible for the production of cancer were neutral nitrogen-free substances. In 1924-1925, Kennaway<sup>24</sup> showed that the carcinogenic agent of tar could also be produced by heating acetylene or isoprene in the presence of hydrogen and proved conclusively that it was possible to obtain a carcinogenic agent which contained only carbon and hydrogen. Stimulated by this work, other investigators found that a series of compounds, such as benzpyrene, dibenzanthracene and cyclopentenobenzanthracene, all possessed carcinogenic properties, that is to say, they are all growth-stimulating substances.

The importance of Kennaway's work was increased when investigation of the chemical structure of body substances, such as cholesterol, ergosterol, vitamin D and the male and female sex hormones, showed them to contain carcinogenic hydrocarbons of the condensed carbon ring compounds derivable apparently, according to Cook<sup>25</sup>,

<sup>20</sup> Yamigiwa, K. and Ischikawa, K. Ueber die Kunstliche Erzeugung von Carcinome. *Gann*, (Japan), XI: 19, 1917, also, *Mitteil. d. Med. Fakul. Kaiserl. Univ. zu Tokyo*, XV: 295, 1915; XVII: 19, 1917, and XIX: 483, 1918.

<sup>21</sup> Tsutsui. *Gann*. (Japan), XII: 17, 1918.

<sup>22</sup> Passey, R. D. *Brit. M. J.*, ii: 1112, 1922.

<sup>23</sup> Bloch, B. and Dreifuss, W. *Schweiz. Med. Wochenschr.*, ii: 1033 (Nov. 10), 1921.

<sup>24</sup> Kennaway, E. L. The Formation of Cancer Producing Substances from Isoprene. *J. Path. & Bacter.*, XXVII: 233, 1924, and *Brit. M. J.*, ii: 1, 1925.

<sup>25</sup> Cook, J. W. Experimental Production of Malignant Tumors. *Proc. Roy. Soc. (Ser. B)*, CXIII: 268, 1933.

from processes within the animal body operating upon degradation products of sterol metabolism. Loeb<sup>26</sup> and others assert that these carcinogenic compounds may induce cancer formation without first causing local irritation, operating merely as growth stimulants. They may produce a cancerous transformation of epithelial as well as of connective tissue; they effect changes in the cells on which they act and these changes ultimately eventuate in the formation of cancer from originally normal cells.

It should be mentioned that the growth-stimulation effect produced by the carcinogenic hydrocarbons is not a direct but an indirect one and differs from the growth-stimulating effect produced by the anterior pituitary hormone. Moreover, the carcinogenic hydrocarbons containing growth-stimulating substances are not selective in their action; they may produce malignant growths in any kind of tissue with which they come into contact; they produce epithelial cancer when applied to the skin and sarcoma when injected subcutaneously, such effects having been demonstrated by animal experimentation.

#### THE ASSOCIATION OF CARCINOGENESIS AND ESTROGENESIS

The next important recent progress in the development of the etiologic bases of cancer was the discovery, as already mentioned, by Kennaway and others that certain body secretions, including the sex hormones, especially estrin, contained carcinogenic hydrocarbons similar to those of carcinogenic tars; phenanthrene ring compounds are now recognized as normal constituents of the animal body. Thus, as shown by Dodds and Cook<sup>27</sup>, estrin, the pituitary-ovarian hormone, contains a partly hydrogenated phenanthrene system in its structure. The molecular structure of estrin and the carcinogenic hydrocarbons is very similar. According to Dodds they are all non-saturated hydrocarbons possessing the tricyclic phenanthrene ring with growth-promoting qualities.

Very important experimental work by Dodds<sup>18</sup> disclosed the startling fact that when carcinogenic hydrocarbon growth-stimulating substances were injected into rats and mice, a full estrus response was obtained. These substances had, therefore, the dual qualities of being carcinogenic and estrogenic. The finding showed that either the phenomena of estrus and carcinoma are closely related or that the carcinogenic hydrocarbons bear the same relationship to the productions of cancer that the synthetic estrin-producing agents bear to the estrus phenomena. The all-important difference between the growth-promoting hydrocarbons and the growth-promoting principle of the anterior pituitary lobe was that the latter growth was con-

trolled, whereas the former was not. Anterior pituitary growth-stimulating substance apparently controls normal body growth, reparative growth and fetal growth; also, as will be seen later, when an hereditary cancer disposition is present the pituitary hormones may control malignant growth in specific regions and tissues. The carcinogenic hydrocarbons stimulate growth anywhere in any kind of tissue in contact with them and such growth is uncontrolled and malignant.

As emphasized by Cook and Dodds, there is no evidence to show that carcinogenic compounds develop from the hormone estrin in the animal body. As demonstrated by Burrows and Kennaway<sup>28</sup>, estrin, unlike tar, does not cause cancer when applied to the skin.

Prolonged stimulation by the estrin hormone has specific effects. As stated in his review by Witherspoon, the estrogenic hormone causes endometrial hyperplasia and increased and prolonged stimulation of the myometrium will subsequently result in uterine fibroid formation, with hypertrophy and hyperplasia. Dodds<sup>18</sup>, Clauberg<sup>29</sup> and others have produced uterine enlargement in women by the administration of large doses of the estrogenic hormone. Witherspoon<sup>16</sup> showed the relationship of endometrial hyperplasia and increased activity of the estrogenic hormone in the absence of corpus lutea influence and presented the clinical and pathologic data in 283 cases of uterine fibrosis to substantiate this relationship. Lewis and Geschickter<sup>30</sup> demonstrated the presence of the estrogenic hormone in a uterine myoma. From the observed facts, Witherspoon is of the opinion that the estrogenic hormone is responsible for endometrial hyperplasia and proliferation. From a thorough investigation by Geschickter and co-workers they thought it logical to conclude that since the estrogenic hormone was the main factor in the development of the human breast at puberty, it was also mainly concerned in the production and development of mammary cancer. This brings us to the question of

#### THE PROBLEM OF HEREDITY IN CANCER

As already mentioned, there is no evidence that the estrin hormone is itself carcinogenic. However, Loeb<sup>31 32</sup> states that it has been possible to prove that ovarian hormones in interaction with hereditary factors are responsible in mice for the origin of mammary cancer. His breeding experiments over a long course of years showed that in different strains and families of mice kept under the same environmental conditions the cancer rate

<sup>26</sup> Burrows, H. and Kennaway, N. M. Effects Produced by Applying Estrin to the Skin of Mice. *Am. J. Cancer*, XX: 48, Jan., 1934.

<sup>27</sup> Dodds, E. and Cook, J. W. Sex Hormones and Cancer Producing Compounds. *Nature*, CXXXI: 205, 1933.

<sup>28</sup> Loeb, L. Internal Secretions as a Factor in the Origin of Tumors. *J. Med. Research*, XL: 477, Sept., 1919.

<sup>29</sup> Loeb, L. Estrogenic Hormone and Carcinogenesis. *J. A. M. A.*, CIV: 1597 (May 4), 1935.

<sup>26</sup> Loeb, L. The Incidence of Carcinoma in Various Strains of Mice. *Proc. Soc. Exper. Biol. and Med.*, 11, 34, 1913-1914.

<sup>27</sup> Dodds, E. and Cook, J. W. Sex Hormones and Cancer Producing Compounds. *Nature*, CXXXI: 205, 1933.

varied between almost 100 per cent and zero, and that in each strain or family this percentage cancer rate remained approximately constant in successive generations and was a genetically determined condition. Ovariectomy caused a marked reduction in the cancer rate and it increased the age at which cancer appeared. These data were interpreted by Loeb as indicating that ovarian hormone, acting on the mammary gland in cooperation with hereditary factors, caused the transformation of the normal glandular tissue into cancerous tissue; the hormone functioned as a stimulant comparable to the action of tar in epidermal cancer.

Loeb considered that the follicular hormone was the carcinogenetic agent, but there were indications that the luteal hormone might also be of significance. In mice it was found possible to increase the cancer rate by administration of a derivative of estrogenetic hormone. The action of estrogenetic hormones in stimulating cancer growth was limited to the tissues in which these hormones induce growth processes during the normal sex cycle, namely to the secondary sex organs. The investigations of recent years had shown that in mammals the sex cycle of the female organism depended upon the action of certain hormones, namely: first, the follicular, which dominated in the phenomena preceding and following ovulation and which caused an active proliferation in the vagina and a more restricted growth in the mucosa of the uterus; second, the luteal hormone, which dominated the second or luteal phase of the cycle, producing placental formation in pregnancy, preparations for embedding of the ovum and the prevention of further ovulation. It was natural to consider the follicular hormone as that principally involved in carcinogenesis. Although the carcinogenetic hydrocarbons when injected could take the place of the sex hormones in producing estrus, it was found that those that had the greatest estrogenetic potency were not the most potent carcinogenetically. Loeb<sup>32</sup> found that some growth-accelerating substances were both estrogenetic and carcinogenetic; some were estrogenetic, but not carcinogenetic; some were carcinogenetic but not estrogenetic; in some that were both carcinogenetic and estrogenetic, there was no parallelism between the potency of the two activities.

#### CLINICAL FINDINGS

Respecting clinical therapeutic applications of the knowledge of the importance of the pituitary direct and indirect hormones in malignant disease, only a rather limited amount of work has been reported. Rosenstein<sup>33</sup> considers the Aschheim-Zondek urine test as of great importance in the diagnosis of chorion-epithelioma, and by using the test Castallo<sup>34</sup> was able to make a correct early diagnosis in such a case. This test is now, of

course, recognized as the most valuable method at our command in the determination of hydatid mole, and in directing suspicion to the presence of early chorion-epithelioma. Witherspoon thinks that estrogenic activity should be suppressed by radium or rentgen-ray in the treatment of cancer, which is not usually done in the case of malignant disease of the genital tract in women who have not yet reached the menopause. Following five clinical trials, Ernst<sup>35</sup> concluded that pituitary anterior lobe injections had no place in cancer therapy. Susman's<sup>2</sup> clinical trials were, however, more favorable. Based on the hypothesis that in cancer cases, the anterior pituitary was over active and the posterior underactive, Susman treated two cases of advanced cancer with pituitrin alone and five cases with pituitrin and theelin. All patients were put on a diet low in carbohydrates. This method was pursued because there was no known direct method of reaching the pituitary secretions. In one case, in a woman aged 76 years, an epithelioma on the dorsum of the foot began to separate and was easily enucleated without cutting after seven weeks of treatment; the growing edge disappeared after five days. All the cases showed regressive changes in the tumor and life appeared to be prolonged definitely. The pituitrin injections were made subcutaneously over the abdomen or at some point distant from the tumor. The pituitrin was given to reinforce the secretion of the posterior pituitary and the theelin to restrain over activity of the anterior pituitary.

#### SUMMARY

In summing up this somewhat sketchy presentation of the endocrine relationship to the etiology of cancer, the main points dwelt upon may be stated as follows: That malignant disease is mainly a problem of disordered growth. That certain endocrine secretions, especially those of the pituitary anterior lobe and its dependencies, are concerned in the production of cancer and other malignant disease on the basis that these hormones accelerate growth. The pancreatic and thyroid secretions and possibly those of the liver are concerned possibly in the metabolism of malignant growths. That certain unsaturated hydrocarbons favor malignancy because they are growth-stimulating substances. They may produce carcinoma or sarcoma according to the tissue affected by them. That some of these carcinogenetic hydrocarbons can produce the phenomena of estrus. That certain body substances and secretions, including the estrin hormone, contain in their chemical structure substances equivalent to, if not actually identical with, the carcinogenetic hydrocarbons. That carcinogenesis and estrogenesis are associated and that estrin may be the carcinogenetic agent in the production of cancer of the female genitalia.

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<sup>33</sup> Rosenstein, W. *Arch. f. Gynäk.*, (cited by Witherspoon).

<sup>34</sup> Castallo, M. A. *Am. J. Obstet. & Gynec.*, XXVI: 893, 1933.

<sup>35</sup> Ernst, G. *Strahlentherap.*, XLVIII: 552, 1933.

## JAUNDICE

### ITS SIGNIFICANCE AND IMPLICATIONS

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Most diseases present certain symptoms. Sometimes the symptoms are strongly suggestive of a particular disease, making possible a diagnosis almost at a glance. Such symptoms we call pathognomonic. Choroidal tubercles in miliary tuberculosis, exophthalmos in exophthalmic goiter, and the gait in tabes might be mentioned as examples. Unfortunately, others are less direct in their suggestiveness, and, while their presence implies that the patient is not well, they do not aid very much in establishing an immediate diagnosis. Fever, chills, leukocytosis, etc., are examples of these. Other symptoms, although not pathognomonic, are still definitely suggestive, and it remains only for us to determine, by means of correct reasoning based upon associated symptoms and past experience, just what their significance is. In this group falls jaundice, for when jaundice is definitely proved to be present, it always has a definite significance.

Bilirubin, the chief pigment of human bile, is derived from hemoglobin by a process of hydrolysis. This is done according to present concepts by the reticulo-endothelial cells of the body, especially those in the bone marrow and spleen, and also the Kupffer cells of the liver. This process is continually going on in health. After its formation, bile is transferred from the vascular capillaries into the biliary capillaries by the polygonal cells of the liver. It is, therefore, evident that jaundice (which may be defined as a state of hyperbilirubinemia) might arise theoretically, at least, in several ways:

First, when bile pigment formed in the endothelial cells passes through the polygonal cells of the liver to reach the bile capillaries but is obstructed in its passage to the intestine and is finally re-absorbed into the blood. This is the typical obstructive jaundice.

Second, when because of damage and functional derangement of the polygonal cells of the liver, the bile-pigment from the endothelial cells is unable to enter them and must remain in the vascular capillaries and so pass directly into the hepatic veins and into the general circulation. This is the so-called toxic or infectious jaundice.

Third, a combination of the above conditions in which, in addition to damage of the polygonal cells, there is obstruction in the biliary passages. In such circumstances, some bilirubin might pass directly into the hepatic veins and some through polygonal cells which are still functioning to be obstructed in the biliary passages and absorbed into the circulation.

Fourth, excessive blood destruction might occur during which more bilirubin is formed in the reticulo-endothelial cells than the liver cells can deal with. Some of this pigment might pass through the polygonal cells into the biliary passages and some directly into the hepatic veins.

Jaundice has been mentioned as being a hyperbilirubinemia. As the process of blood destruction is a continual one in health, and bilirubin is, therefore, constantly present in the blood, we must determine when this amount becomes excessive and pathological. The two tests usually used for the determination of the amount of bilirubin in the circulating blood are the icterus index and the van den Bergh. The first is a direct color comparison between the serum and a 1/1,000 bichromate of potash solution. The normal reading is from 4 to 6. A reading from 6 to 16 constitutes the zone of latent jaundice and when the reading is above 16, clinical jaundice is apparent. The van den Bergh test is a chemical one, based on a color reaction which occurs upon the addition of certain chemicals to the serum. It is probably the most accurate test for the determination of quantitative bilirubinemia though some workers prefer the icterus index. The reading is given in milligrams per 100 c.c. of blood serum. The normal is usually under 0.5 milligrams, though values as high as 1 milligram may be found in some normal individuals.

From 1 to 2 milligrams indicates latent jaundice and when it is above 2 milligrams, clinical jaundice is usually apparent although it may be higher than this in the hemolytic types before clinical jaundice is evident. When the reaction is obtained by the direct mixture of the serum and the reagent, it is called the direct reaction. When the reaction is obtained only after the addition of alcohol, it is called the indirect reaction. Bilirubin as it exists in the bile gives both a direct and an indirect reaction. Bilirubin as it exists normally in the blood stream as a result of the hydrolysis of hemoglobin gives only the indirect reaction.

When a patient with jaundice presents himself, the clinician must first decide without undue delay whether he should receive medical or surgical treatment. To operate on a non-surgical case, or not to operate on a surgical one, may be attended with equally serious results and must be avoided if at all possible. Operation in the presence of jaundice is attended with increased operative risks, especially from hemorrhage. In addition, patients with toxic or infectious jaundice do not tolerate anesthesia well. Any added trauma to the liver is not well borne when the liver is infected. On the other hand, to delay operation too long in the presence of a stone in the common duct carries with it the probability of dilatation of the intrahepatic biliary vessels and an increasing infection with a resulting biliary cirrhosis of the Charcot type.

McNee has divided all jaundice into three types:

- (1) Hemolytic or hematogenous;
- (2) Toxic-infectious or hepatogenous;
- (3) Obstructive.

The first two are practically synonymous with medical jaundice (with the exception of congenital and acquired hemolytic icterus) and the latter with surgical jaundice. The difficulty is in determining in which case the jaundice is obstructive and hence surgical and that in which it is toxic or infectious and hence medical.

McVicar and Fitts<sup>1</sup> have suggested the following criteria as practical aids to the early determination of the significance of jaundice:

- (1) The reaction of the serum with the van den Bergh reagent, (i. e., direct or indirect);
- (2) The height and behavior of the serum bilirubin curve as determined either by the van den Bergh or icterus index tests;
- (3) Information as to the patency of the biliary passages as determined by the examination of the stools, urine and duodenal contents;
- (4) The presence or absence of pain and its character and time relation when present.

While the van den Bergh test is not of as great help as we might wish, yet the fact that the serum of the normal individual and of the patient with hemolytic icterus gives an indirect reaction and that of the patient with an obstructive jaundice or with intra-hepatic parenchymal damage, at least in the later stages, gives the direct reaction, permits some differentiation in itself.

Duodenal drainage is of the greatest help in the differentiation between carcinoma of the head of the pancreas and intra-hepatic jaundice. In both these conditions the jaundice is deep and its onset usually painless. If bile is persistently absent in the duodenum on three consecutive days, it points to carcinoma. It is rarely absent, though altered in consistency, in intra-hepatic jaundice. A complete absence of urobilinogen or urobilin from the stools or urine in repeated examinations indicates complete and permanent obstruction of the duct.

The presence or absence of pain is of the greatest value in differentiating various types of jaundice. In hemolytic and intra-hepatic jaundice and obstructive jaundice due to pressure on the duct, pain is characteristically absent. In cases of stone in the duct, pain is usually present and characteristic in type. In typical cases of stone in the duct, jaundice follows pain, but in about 5 per cent of cases pain is absent. In other cases pain may have been present but the onset of jaundice is painless, thus simulating carcinoma of the head of the pancreas. In still other cases (in percentages varying from 1 to 30 as given by various authors) jaundice may be absent at all times. Jaundice due to carcinoma of the head of the pancreas is usually considered the typical painless jaundice but Weir

and Partch<sup>2</sup> in 38 cases reported pain in 14. The pain, however, is rather boring in character and more or less constant, and the condition can be differentiated by the absence of bile in the duodenal contents. Painless jaundice in a previously non-operated patient points to: (1) carcinoma of the head of the pancreas or of the duct itself; (2) toxic or infectious jaundice; (3) stone in the duct. If there is bile in the duodenal contents it usually suggests intra-hepatic jaundice, but it may be due to stone (in 5 per cent of cases) in the duct.

Painless jaundice in a previously operated patient indicates (1) stricture (from trauma or infection or, if immediate in its onset, to injury of the duct at operation); (2) recurrent or missed stones (in about 5 per cent); (3) a combination of above conditions; or (4) in rare cases it may occur with no demonstrable pathology.

Another help in the differential diagnosis of jaundice is Courvoisier's law. This states that in the presence of jaundice a dilated gall bladder which can be felt through the abdominal wall is an indication that the obstruction to the bile stream is due to malignancy either of the head of the pancreas or of the common duct below its union with the cystic duct. A contracted gall bladder in the presence of jaundice is evidence that the obstruction to the bile passage is due to stone. Most clinicians find, however, that the gall bladder is palpable in only about one-third of the cases of carcinoma of the head of the pancreas.

Lahey<sup>3</sup> has modified the law for practical purposes. He says, "In the presence of jaundice which is painless and progressive and associated consistently with acholic stools, a dilated gall bladder palpable through the abdominal wall is almost certain to be due to malignancy of the head of the pancreas or of the lower end of the common duct. In the presence of jaundice a contracted gall bladder indicates that the obstruction to the duct is probably due to stone." Further helps in this differentiation are the presence of blood in the duodenal drainage which suggests malignancy, the presence of pus and mucus which suggests infection, and the presence of cholesterol or calcium crystals which suggest stone.

Of the hematogenous types only congenital and acquired hemolytic icterus is of surgical importance. Fortunately, it gives almost pathognomonic laboratory data which are (1) increased fragility of the red blood cells; (2) anemia; (3) microcytosis; (4) high reticulocyte count; (5) moderately increased bilirubinemia (rarely over 10 milligrams in 100 c.c.); (6) indirect van den Bergh reaction; (7) coagulation time is not increased; (8) bile is present in the duodenal contents; (9) urobilin is increased in the urine but bilirubin is absent.

<sup>2</sup> J. F. Weir and W. T. Partch. Relationship of Pain to Jaundice. *Annal of Int. Med.*, Vol. 4, pp. 1509-1520, June, 1931.

<sup>3</sup> Frank H. Lahey. Management of Patients with Painless Jaundice. *Surg. Clin. of N. A.*, Oct., 1934, pp. 1127-1135.

Jaundice of the hepatogenous type is often extremely difficult to separate from the obstructive type because both give a direct reaction to the van den Bergh tests and the differentiation must be made on the history and a careful general examination. In these the serum-bilirubin usually runs from 5 to 10 milligrams and changes little from day to day. The galactose tolerance test has proved disappointing as a differential aid.

In a review of 533 cases of disease associated with jaundice, Eusterman<sup>4</sup> found the jaundice to be obstructive in type in about 85 per cent of all cases and he found stone in the duct to be the most frequent cause of the obstruction. Other causes, in the order of their incidence, are cholecystitis with stone, carcinoma of the pancreas, stricture of the ducts, primary carcinoma of the extra-hepatic bile ducts, carcinoma of the gall-bladder, acute and chronic pancreatitis, and cholecystitis without stone. Common to this group are moderate anemia, decreased fragility of the red blood cells and prolonged coagulation time. The hepatic function tests are usually positive. In cases of stone, bile is usually found in varying quantities in the duodenum. In stricture of the ducts, the bile flow is scanty and in carcinoma is absent. Bile pigment is present in the urine in all types of obstructive jaundice.

Of more value than isolated examinations is the determination of the serum-bilirubin curve. In stone the curve is variable; it may suddenly rise after pain and may suddenly decline after cessation of pain. Intermittent jaundice is usually indicative of stone. It may, however, rarely be found in carcinoma and hepatogenous jaundice. In stricture the curve is at a low level. In carcinoma the amounts are high and the curve rising. The gradual return of the curve to the normal before clinical signs have disappeared is of great help in prognosis.

Since biliary duct stone plays such an important part in the etiology of jaundice it behooves us to pay particular and insistent attention to the symptoms which may indicate the possible presence of such stones. Judd<sup>5</sup> in 1931 reported 1,768 cases in which stones were removed from the bile ducts. In 25.5 per cent of these there was no history of jaundice, in about 20 per cent the symptoms were indefinite, and in about 2.5 per cent there were no symptoms. In 160 of these cases one or more stones were removed from the ampulla but the rest of the duct was free. Of these 45 per cent had previously had biliary tract surgery. In 1,608 cases stones were found in the hepatic or common duct. Of these 22.6 per cent had had previous operations on the biliary tract. Cholecystostomy had been the most

common procedure but in many cases the common duct had been explored. As stones rarely reform in the common duct the majority of them must have reformed in the gall-bladder and passed to the duct or been overlooked at the primary operation.

The difficulty of diagnosing the exact condition present in some of these gall-bladder cases, and the extremely difficult surgical problems presented are well known, yet the report of a series in which duct stones had been missed in so large a percentage of cases raises the question as to whether our indications for common duct exploration should not be broadened. The surgeon who misses a common duct stone, as Lahey<sup>6</sup> says, leaves the most important part of the pathological process and raises the mortality of the second operation from slightly above 2 per cent to 10 per cent in routine gall bladder surgery in the hands of the skilled surgeon. He says that previous to 1926 he left a stone in the common duct in 1 of every 10 gall bladder operations. The incidence of the discovery of stone in the common duct then was 8 per cent. In 1932 the incidence of discovery was 19 per cent, and in 1934 it reached 21 per cent. This is explained by the fact that previous to 1926 he opened the duct only in 12 per cent of cases and in 1932 he opened 46 per cent of them. He recognizes that a stone may be present in the duct with no jaundice, past or present, with no history of pain, colicky or otherwise, and that the stone may be non-palpable and the duct not thickened or dilated. He gives five indications for incising the duct: (1) history of jaundice; (2) contracted or thickened gall-bladder; (3) dilated common duct; (4) thickened head of the pancreas; (5) when the stones in the gall-bladder are small and the cystic duct is patent because such stones may easily pass into the duct.

It is recognized, of course, that if these indications are more generally used the mortality of primary gall-bladder surgery may be somewhat increased in the hands of the inexperienced surgeon. Lahey says that the immediate mortality in the hands of the skilled surgeon should not be at all increased and the remote mortality should be very materially lessened.

#### SUMMARY

(1) Jaundice is an important symptom which should not be neglected and every attempt should be made to discover its cause with a view to early and proper therapy of the underlying condition.

(2) The physiologic and pathologic mechanism of jaundice has been briefly reviewed.

(3) A practical working scheme which makes use of all significant associated symptoms and pertinent laboratory aids which will help toward an early differentiation of surgical and medical jaundice has been discussed.

<sup>4</sup> Geo. B. Eusterman. Errors in the Diagnosis of Diseases Associated with Jaundice. *Ann. of Int. Med.*, Vol. 6, No. 5, Nov., 1932, pp. 608-621.

<sup>5</sup> E. Starr Judd. Fundamental Problems Involved in Surgery of the Biliary Tract. *N. W. Univ. Med. School Bull.*, 32, 1-21, Nov., 1931.

<sup>6</sup> Frank H. Lahey. Present Management of Biliary Tract Surgery. *Surg. Clin. N. A.*, Vol. 12, p. 566, June, 1932.

(4) Attention has been called to the frequency of common duct stone as a cause of jaundice; to the serious results which may follow over-looked stones; and to the rapid and marked increase in the incidence of common duct stone discovery *pari passu* with an increase in common duct exploration. A plea is made that, following the suggestion of Lahey, the indications for common duct exploration be broadened.

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## RUPTURE OF SARTORIUS

### CASE REPORT

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A professional man, a dentist, age forty-three years, weight 227 pounds, while hunting on November 11, 1935, shifted his body through a fence from right to left. His left heel slipped, abducting the thigh, overextending the pelvis on the thigh, and rotating the pelvis inward on the thigh. He experienced a sudden, very severe, non-radiating, sickening pain in mid-antero-lateral left thigh. Immediately he grabbed this area and felt a hard, tender mass about the size of one-fourth fist. Seating himself, he massaged the thigh. Pain was continuous thereafter. He had to walk one and one-half miles to his automobile. Each attempt to carry his left thigh forward and support his weight intensified the pain and caused copious perspiration. After traversing the distance to his car, which required one hour, he inspected the site of injury to find the swelling about the size of a full fist, solid and tender, but not discolored.

He returned home, went to bed, and taped the area of injury tightly. The next morning ecchymosis showed over and surrounding the spot of injury and extended down the medial thigh to the knee. Using this thigh to support his weight while he shaved and walked to his office caused such severity of pain that he was forced to bed. The swelling and ecchymosis increased greatly.

Inspection thirty hours after the injury showed in mid-antero-lateral left thigh a firm, tender, raised area, harder than surrounding tissue. This tumor increased slightly in size when anterior thigh muscles contracted and contraction caused "a sickening misery." The patient held the leg in flexion on the thigh, the thigh flexed, adducted, and rotated inward on the pelvis. Ecchymosis extended from the hematoma down the medial thigh to the medial condyle of the femur. The hematoma was situated below the skin and fascia, but superficial to the deeper muscles. The ecchymosis which followed the course of the muscle with its fascia did not show through the skin on the day of injury according to the patient's account, but appeared the day after, not in the skin but in

the underlying fascia. An attempt to stand and shave the day following the injury caused an increase in the size of the tumor, an increase in pain, and a more pronounced ecchymosis in the fascia lata downward and medialward to the knee.

There was no herniation of the muscle, nor was rupture complete. The fascia was not torn sufficiently to make open repair advisable. Hemorrhage caused by use of the part dictated the treatment. Absolute bed rest with the leg in flexion and inward rotation, the thigh in flexion and outward rotation, and an ice bag at point of rupture constituted the treatment. After three days diathermy was started. Pain ceased after the fourth day if the patient held the part motionless. After three weeks in bed he was permitted to be up on crutches. When standing, he at first had some pain with the leg hanging without weight bearing. Gradually weight bearing was started. Weakness was noticeable, probably more pronounced because some pain accompanied use. On the fifth week a cane replaced crutches. He was unable to stand long at his dental chair until the ninth week. The tenth week found him able to climb stairs with neither crutches nor cane, although slight pain was experienced.

ODD FELLOWS BUILDING.

## INDIANA STATE MEDICAL ASSOCIATION ANNUAL GOLF TOURNAMENT

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## BONE SARCOMA

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It has been estimated that there are in the United States, at any one time, from 750 to 1,000 living cases of malignant bone tumor. From the mortality statistics of approximately 120,000 deaths yearly from cancer, there are, it is estimated, approximately 400,000 living cases of cancer in the United States. This would give a proportion of malignant bone tumors to malignant tumors in general of about 1 to 400. The relative frequency of primary bone tumors is thus established as 1 case to 100,000 population. In England the estimate is 1 to 75,000 of population. An approximate yearly death rate might be placed at 400, mostly in individuals in the prime of life.

The incidence of primary bone sarcoma is about one to three of all sarcoma that occur in the human body. Lymphosarcoma ranks second. Primary malignant bone tumor is twice as common as benign giant cell tumor. There is no exact method of estimating the relative frequency of Ewing's tumor to malignant bone tumors in general. There are in the Registry of Bone Sarcoma of the American College of Surgeons 105 cases of Ewing's tumor and 745 cases of osteogenic sarcoma. This does not give an accurate picture but does give us some idea of the relative frequency of the two conditions.

### ETIOLOGY

Whatever may be our views concerning the matter, the fact remains that trauma is frequently associated with the origin of bone sarcoma. The question, therefore, naturally arises, "What is the relationship of trauma to the appearance of the tumor?" While the history of trauma is frequent, it is difficult to decide as to whether the trauma caused the tumor or merely called attention to it.

Kolodny offers a very interesting explanation of the possible connection of trauma with malignant cell development. The animal tissue cells have certain growth capacity transferred from the fertilized ovum. This growth proceeds during the period of development without any need of stimuli from the outside. When adult stage is reached some change occurs which causes this rapid physiological development to be halted and a stage is reached which might be called growth restraint. If some cessation of activity of growth did not occur there is no telling what the end of the animal organism might be. The potential growth ability of the tissue cells is still present and following trauma growth restraint is temporarily in abeyance until repair is made. Thus under certain

conditions trauma might lead to loss of growth restraint in a certain organ and the individual "repair to death" as one with hemophilia might bleed to death.

While the explanation is an ingenious one, it does not give thought to the restraint in growth of a benign tumor. Can it be denied that a tumor may have existed and been called to attention by the trauma? When we consider how infrequently sarcoma follows trauma in general, the importance of trauma in etiology is discredited.

So far as any definite etiological factor is concerned, I have none to offer.

The social condition of individuals has no bearing, as cases are found in all walks of life. In the first decade the female sex predominates, after which the male sex predominates about four to three.

Osteogenic sarcoma is a disease of the young. The highest incidence is in the second decade of life at the time of most active skeletal growth, which active growth of the skeleton may have some influence on the etiology of these tumors.

### CLASSIFICATION

A satisfactory classification of bone tumors is necessary if advance in scientific knowledge is to be made. In no other field, possibly, has there been such a multiplicity of names, as have been used for bone sarcoma. The nomenclature varies in different parts of the same country and even in the same community. I venture to say that in this locality many divergent names and classifications are given to bone tumors and that men frequently are talking about the same thing but using different names.

The classification presented by the Registry is the best available at this time. It embraces all bone tumors, benign and malignant, primary and secondary, under eight headings:

1. Metastatic tumors
2. Periosteal fibrosarcoma (fibroma)
3. Osteogenic tumors
  - A. Benign
    1. Exostoses
    2. Osteoma
    3. Chondroma (myxoma)
    4. Fibroma
  - B. Malignant—Osteogenic sarcoma (to include spindle cell sarcoma, round cell sarcoma, osteosarcoma, chondrosarcoma, mixed cell sarcoma, angiosarcoma, perithelial sarcoma, bone aneurysm, etc.)
    1. Anatomic types
      - a. Medullary and subperiosteal
      - b. Periosteal
      - c. Sclerosing
      - d. Telangiectatic
    2. Undifferentiated sarcoma
  4. Inflammatory conditions which may simulate bone tumors
    - A. Myositis ossificans

- B. Osteoperiostitis
  - 1. Traumatic
  - 2. Syphilitic
  - 3. Infectious
- C. Osteitis fibrosa (including bone cysts)
- 5. Benign giant cell tumor
- 6. Angioma
  - A. Benign
  - B. Malignant (angiosarcoma)
- 7. Ewing's tumor
- 8. Myeloma

Because the field is a very broad one, I will limit the scope of this paper to a discussion of osteogenic sarcoma with something to say of Ewing's sarcoma, and giant cell tumor.

Ewing coined the term osteogenic sarcoma. An osteogenic tumor, according to the Registry concept, is a sarcomatous tumor derived from osteoblasts, a tumor in which various or all stages of development of osteoblasts may be seen, from a simple spindle cell to true bone cells. Kolodny believes that classification of tumors according to cells—round celled, spindle celled, etc., without their origin and clinical peculiarity being noted, is inaccurate because no information of diagnostic or prognostic importance is furnished thereby. Further, naming osteogenic sarcoma according to the tissue composing them is of questionable value, as the majority of osteogenic tumors studied show a conglomeration of tissues of mesoblastic origin. A diagnosis which would include all the type of tissue found only adds to the confusion.

From the anatomical side the Registry recognizes four types of osteogenic sarcoma: (1) the periosteal, (2) the subperiosteal, (3) the sclerosing, and (4) the telangiectatic. Ewing, who shaped this classification, urges this division because these types are supposed to differ in their gross anatomy, in their microscopic picture, and in their clinical course. In considering the periosteal and subperiosteal types, it is obvious that this differentiation has no value in clinical diagnosis. It is clinically impossible to state the exact beginning of a tumor as periosteal or subperiosteal from the roentgenogram and even with the gross tumor in your hands.

The sclerosing and telangiectatic types are considered by Kolodny as phases in tumor development which may vary with tumor growth. These points are mentioned to emphasize the fact that an entirely satisfactory classification of bone tumors is not yet with us and that clinical, pathological, and x-ray features must all be taken into account in classification. It means the union of the clinical man, roentgenologist and pathologist in classification.

#### PATHOLOGY

The point of origin of an osteogenic sarcoma is difficult to ascertain. It is a diffuse growth in bone and it can never be determined accurately at what point it begins. The shape and consistency

of the tumor will be determined by the balance between the growth aggression of the cells and the resistance offered by the tissues they are invading. The growth of the tumor leads to destruction of bone, which is a characteristic of osteogenic sarcoma and which tends to identify it. The tumor growth proceeds in two directions, one toward the periosteum and later through it, and the other along the medullary canal. The medullary canal offers the least resistance and it may be filled with tumor cells without any evidence of such a growth appearing in the x-ray.

The periosteum offers resistance to the growth and tends to limit its extent. Once the periosteum has been pierced, the growth of the tumor is more unrestrained and the increase in size becomes much more noticeable. The epiphyseal cartilage also offers resistance to the growth, probably due to the absence of blood vessels, and for that reason the joint proper is not invaded early. It is only when the periosteum is penetrated that the growth proceeds around the epiphyseal cartilage and the joint becomes involved. The skin over the tumor becomes very thin and glossy as it is stretched by the growth, but never ulcerates, having a marked resistance to the tumor cells.

Anatomically the consistency of these tumors may vary considerably. The degree of firmness will depend upon the predominance of the cellular elements, those containing the largest amount of cartilage and bone tissue being of the most firm texture. There may also be a variance in the degree of vascularility, all stages being present from a tumor perhaps of the sclerosing type with a very poor blood supply up to the extreme stage of vascularility in a tumor of the telangiectatic type, known sometimes in the literature as a bone aneurysm in which a distinct pulsation is both seen and felt.

To obtain the best idea of the consistency of an osteogenic sarcoma it should be compared to the process of repair of a broken bone in which several of the stages of repair are present at the same time. The blood clot forming between the broken ends of the bone is organized by fibrous tissue formation which in turn is formed into bone callus. In an osteogenic sarcoma all these stages may be present simultaneously and usually several are present in any given tumor.

In further pathological differentiation osteogenic sarcoma may be divided into the osteolytic, or bone destroying type, and the osteoblastic, or bone making type. Kolodny believes that true osteolytic or osteoblastic types do not exist but that usually there is a combination of these activities going on in any given tumor. It is possible for one or the other of these activities to predominate, however. From the standpoint of structure we may say that we do not have a type of osteogenic sarcoma which could be called typical. As Kolodny points out, these tumors are histologically atypical. The tumor cell is derived from the mesoblast and

has the potentiality to form bone. These cells may indeed differentiate into osteoblasts but all do not, and in an osteogenic sarcoma all stages of cells between the primary elements and the osteoblasts exist. Bone and cartilage formation together with hyaline and myxomatous degeneration, all in the intercellular substance, add to the difficulty of cell differentiation.

The most frequent cell type found is the small variety of the spindle cell which one would expect to be most prevalent as it is the standard type of cell engaged in repair of bone. While a cell differentiation is difficult, we may say definitely that there are two types of cell which do not occur in osteogenic sarcoma. The first of these is the giant cell. The second is the round cell. Osteogenic sarcomas are never of the round celled type.

In general, osteogenic sarcoma occurs mostly at the metaphysis of the long bones. An occurrence in the shaft is rare. They form metastases usually quite early, which may occur in any organ of the body such as the abdominal cavity, the brain, in other bones and even, but rarely, in the skin. Their high malignancy is due to these metastases. The large majority of deaths occur from metastases in the lungs. The growth of these metastases in the lung is usually slow and they may have all the cell differentiation of the primary tumor with even the formation of bone.

#### DIAGNOSIS

In the diagnosis of osteogenic sarcoma, the history, physical examination, x-ray findings, and microscopic picture must be combined.

The history is of great importance. The onset is with pain before the tumor becomes noticeable and so constant is this factor that Codman says unless pain precedes other symptoms the case is not one of osteogenic sarcoma. Care must be taken at this stage to avoid a very common mistake of calling the case one of rheumatism.

The duration of an osteogenic sarcoma is relatively not long. Rarely do they seek a doctor before a month has passed and usually do before a year has elapsed. The pain is not severe at first but growth usually proceeds rapidly, being quite noticeable from month to month, and most cases seek advice before a year. We may suspect a non-malignant tumor if it has been of several years standing. Osteogenic sarcomas arise in previously healthy persons, and if a patient gives a history of being in poor health before the onset, one may expect the tumor to be of inflammatory origin, tuberculosis, syphilis, osteitis, etc. Osteogenic sarcoma rarely occurs in persons over fifty except in those with Paget's disease where the incidence is 12 to 14 per cent. It is more common in the young.

In examination of an osteogenic sarcoma, we find a fixation of the soft parts. It is not movable. It does not roll over the bone as a benign tumor does.

Approximately one-half of osteogenic sarcomata occur in the femur; one-quarter in the tibia; one-eighth in the other long bones. The phalanges of the fingers and toes, the carpal bones, and most of the small tarsal bones seem exempt. Osteogenic sarcoma is rare in the shaft of long bones. This is the usual site for Ewing's tumor, of myeloma, or carcinomatous metastases.

Rarely are inflammatory signs present in osteogenic sarcoma. If present, they are usually mild. In any event there is not the pronounced fever, tenderness, redness, leukocytosis, etc., that one finds in osteomyelitis, although these tumors are frequently taken for osteomyelitis. Ewing's tumor often resembles osteomyelitis, both by clinical symptoms and x-ray, and early the therapeutic x-ray test is the only reliable differentiation one has. Ewing's tumor definitely improves in early stages under x-ray radiation.

Early these tumors do not attack the joints which are usually free, and it is not until later when the growth has become very extensive that the joint area is attacked. Osteogenic sarcomas are usually of relatively large size when discovered and more or less surround the bone, being both intra and extra cortical. They are never pedunculated.

The x-ray is of great help in the diagnosis of bone tumors. Films of good detail made in two diameters are preferable. There are a number of differentiating points which we may consider in a general way.

Malignant tumors of bone are both intra and extra cortical. Benign tumors are either intra or extra cortical. A malignant tumor is not sharply outlined. The edges are not clear cut. The density is not uniform. In benign tumors there will be a sharp outline toward the bone and the surrounding soft parts. The shaft of the bone in osteogenic sarcomata will always be found in its normal position, not expanded or displaced, and even if nearly destroyed, the fragments will occupy the normal position of the old shaft. In a benign giant cell tumor an appearance of distention of the cortex is seen, and in Ewing's tumor the cortex is usually widened. Lipping of the periosteum is a characteristic of malignancy and is not found in benign tumors. Osteogenic sarcomata are of spindle form which form is unusual in a benign tumor. The advancing edge of an osteogenic tumor in spongy bone is irregular and wavy in outline.

A typical osteogenic sarcoma shows both absorptive and bone building activities—osteolytic and osteoblastic. A metastatic carcinoma shows an absorptive or osteolytic quality only.

In osteogenic sarcoma, the sun ray formation of bone spicules has been thought positively diagnostic and has been often stressed. A similar arrangement in chronic inflammatory processes in bone is known to occur. In only eighteen per cent of the Registry cases is the sun ray or fan-like structure seen. As an x-ray diagnostic feature, it is

not reliable. Keeping in mind the general points of importance in x-ray diagnosis, it might be well to mention the main points of differentiation in conditions which may be confused with osteogenic sarcoma:

1. Subperiosteal hemorrhage in hemophilia may be of spindle form, lipping of the periosteum may be present, and even necrosis of the cortex by pressure of blood beneath the periosteum. Here the clinical findings and course will be of help.

2. Bartow's disease may also cause confusion, but here the hemorrhage is usually limited to the diaphysis of the long bones.

3. Traumatic periostitis does not as a rule surround the bone as does osteogenic sarcoma. The cortex is uneroded.

4. Myositis ossificans may be confusing, but should offer no great difficulty unless accompanying an osteogenic sarcoma as it sometimes does. It usually develops during the first three or four weeks following trauma and becomes quiescent. It is bone-like in hardness and has not the resilient feel of sarcoma.

5. The similarity between bone syphilis and osteogenic sarcoma may be very great. It is impossible to differentiate at times by an x-ray alone. The Wassermann and provocative therapy are helpful. In syphilis, destruction is very extensive in a small-sized tumor and the periosteal lipping absent.

6. Skeletal chondromas have a sharply outlined, pedunculated base, connecting with what appears to be normal bone. There is an absence of the periosteal spindle. Intra-osteal and multiple chondroma show a thinning of the cortex and well defined bony septa which are absent in osteogenic sarcoma.

7. Differentiation of carcinomatous metastases is hardly possible from x-ray alone. The presence of lipping and an unexpanded shaft denote a sarcoma.

In bone cyst, similarity in clinical symptoms may be great. It is always intra-osteal. It expands the shaft, the cortex becomes very thin but practically never breaks through. It is found in the diaphysis. It is usually ovoid. In the ends of bone it may have trabeculations like a giant cell tumor.

9. Ewing's tumor is so uniformly diagnosed osteomyelitis in early stages that it has become a typical error. The close resemblance in onset, trauma, pain, fever, and bone destruction make it difficult, if not impossible, to differentiate. Surgery is followed by rapid growth. Radiation differentiates. Ewing's tumor responds miraculously to x-ray radiation which forms the deciding fact in diagnosis.

10. Osteogenic sarcoma does not have the clinical resemblance to osteomyelitis that Ewing's tumor has and it is much more easily differentiated. Ewing's tumor may be difficult to differentiate from osteogenic sarcoma, but usually the x-ray is char-

acteristic. Ewing's tumor in contrast to an osteogenic sarcoma shows a diffuse involvement of the bone. The diaphysis is the site and not the bone ends. A large length of the bone is involved, the shaft being replaced by the tumor. The new bone is laid down parallel to the shaft and not radiating as in osteogenic sarcoma.

Giant cell tumor is in direct contact with the articular cartilage. It occupies the ends of bone. It extends into the shaft before breaking through the cortex. The radiological picture is characteristic. It is multicystic in appearance. The shaft of the bone is absent. Beyond the tumor the cortex and periosteum are intact. The medullary cavity is not affected. Giant cell tumor is not a malignant tumor. It is not a sarcoma. The tumor expands the old shaft. A few trabeculae running in various directions give the "soap bubble" appearance to the roentgenogram which is so characteristic. It is about one-half as frequent as malignant bone tumor; it is more common in females, and occurs most often between the ages of 16 and 25.

Extra periosteal sarcoma does not invade the bone, but may cause erosion by pressure. It is entirely extra cortical and arises from the fibrous layer of the periosteum. The histological structure is that of a fibro-sarcoma. The x-ray films usually show an intact shaft running through a tumor mass that does not surround the bone circularly. The outline of the tumor is faint. There is no lipping of the periosteum.

Kolodny is of the opinion that a histological examination is not reliable in differentiating an osteogenic sarcoma or a Ewing's tumor. Surgical exploration is attended with danger, also, and may lead to rapid increase in growth of the tumor. The information gained by this means is usually of little help. Several cases in the Registry had repeated biopsies, in one case as many as five, without a conclusion being reached, and in each instance was followed by rapid increase in growth of the tumor.

A better method of differentiating is by radiation. Osteogenic sarcoma and particularly Ewing's tumor respond rapidly to x-ray radiation which is in itself diagnostic and not attended with the dangers of biopsy. In giant cell tumor, the case is different and absolute diagnosis can usually be made by biopsy.

#### TREATMENT

While radical surgery in relation to bone sarcoma has been disappointing, it still is our mainstay in any treatment we have to offer. Radiation, however, is a useful adjunct and in some instances perhaps a less radical excision may be resorted to.

In certain instances in dealing with carcinomatous lesions which are diagnosed early and are well circumscribed, surgery offers great hope of a cure. In bone sarcoma, however, we have nothing to help us make an early diagnosis of an incipient bone tumor. Metastases come early, perhaps, or

it may be that subjective symptoms, calling the patient's attention to the tumor, do not appear until the tumor is well under way and metastases already formed. The opportunity for surgery, therefore, does not come early in the tumor growth and the possibility of complete surgical removal is correspondingly less.

Kolodny in his work on bone sarcoma offers three indications which must be fulfilled before radical surgery is resorted to:

1. Certainty of the diagnosis. Careful study of the growth must be made both clinically and radiologically for an accurate diagnosis. There will be instances when the diagnosis is in doubt and in those instances an exploration of the lesion may be justified, but only when the surgeon is prepared to proceed immediately with the amputation once the diagnosis is established. Exploration followed by conservative treatment is wrong when the diagnosis of a malignant tumor has been made.

2. Do not operate unless it is possible to remove all the growth—"all or nothing." This rule does not hold in osteogenic sarcoma of the spine, skull, or pelvis.

3. Absence of demonstrable metastatic growths. A radiological examination of the lungs should be done. The skeleton also should be examined for metastases. An exception to these rules is a patient suffering from great pain which is not relieved by radiation. Radical surgery here should be considered even if there are other features which would contraindicate it.

There are some occasions, particularly with a malignant chondroma, when the question of excision rather than amputation may be considered. Excision is a severely mutilating operation and calls for subsequent bone grafting and surgical repair. Even the most experienced in detecting the limits of the tumor growth may miss a portion of the tissue and in the hands of a man who sees only an occasional tumor, the operation of amputation is especially to be preferred. Indeed, I believe it is the operation to be preferred in all hands. Care must be taken to amputate high enough and to remember that the tumor cells often grow along the medullary cavity of the bone much further than the x-ray would indicate.

X-ray radiation is being increasingly used in the treatment of bone sarcoma. It should be done by one experienced in such treatment, as proper dosage is important. Too small a dose may stimulate the growth, too large a dose may do harm to surrounding tissue. The reaction of tumors to radiation is variable. Tumors of the same type in different individuals may react differently. Cellular and vascular tumors usually give a rapid response; on the other hand, tumors of the myxomatous type, skeletal chondromata, and sclerosing osteogenic sarcoma respond very little, if at all.

X-ray radiation is especially effective in keeping in check metastases in the lungs. In every instance preceding surgery, it is good practice to radiate

the lung areas. It has been my experience, and I know the experience of others of you, to see lung metastases kept in check for several years by this means. It is probable that as our knowledge and skill in the use of x-ray radiation increases, it will become a more effective agent in our hands.

In general, it may be said that Ewing's sarcoma requires more prolonged radiation than osteogenic sarcoma. It seems generally believed that radium is to be preferred to x-ray in treatment of this tumor.

Radiation in some cases has more to offer than surgery, particularly in multiple Ewing's sarcoma, or the inoperable osteogenic sarcoma, in keeping the tumor in check, reducing pain, and prolonging life. The introduction of radium directly into the tumor mass is not justifiable as it has the same danger as an exploratory incision without a radical follow-up cure.

The best treatment we have to offer at present is radical surgery with x-ray and radium radiation as an adjunct. The way proposed by Kolodny probably summarizes the best opinion on treatment at this time of osteogenic sarcoma. He says, "Immobilization of the extremities and recumbency are followed after efficient radiation by amputation. Moderate prophylactic radiation of the chest is to be continued throughout the course of the disease."

The use of Coley's toxins has had a place in treatment. The toxin theory has its background in the belief that malignant tumors are the result of bacterial infections and that raising the immunity of the subject will relieve or cure. It is also based on the observation of the spontaneous disappearance of malignant tumors following an erysipelatous infection of the patient. The therapeutic action sought is the active immunization of the patient.

Codman looks with some favor on the use of Coley's toxin. Most men, while recognizing his sincerity, feel that its use is discredited. One thing may be said, however, in its favor, and that is that its use does increase the effect of radiation.

In analyzing the Registry cases, I find 67 reported cases of so-called five-year cures recognized (May, 1934). Four have died from metastases in nine to eleven years following treatment. Two other cases have had evidence of metastases which have disappeared after treatment.

Sixty-four of the sixty-seven cases were treated by surgical methods, and of these, thirty-six by surgical methods only. One case was treated by x-ray radiation alone. The other thirty cases were treated by surgery with the addition of x-ray radiation or radium or Coley's toxin or a combination of these agents. In fourteen of the cases, Coley's toxin was used.

Amputation was done in all but eight of these cases. In seven of these, a local excision was done, supplemented by the use of some other agent. The remaining case was treated by x-ray alone.

It might be interesting to enumerate these eight exceptions to amputation.

1. Local excision of tumor of lower part of femur followed by radium.
2. Local excision of tumor of lower part of tibia followed by radium and Coley's toxin.
3. Excision of tumor of ilium followed by radium.
4. Tumor of ilium treated by x-ray only.
5. Tumor of rib treated by resection followed by radium.
6. Tumor of rib explored and then treated by radium and Coley's serum.
7. Tumor of scapula treated by excision and x-rays.
8. Tumor of scapula treated by excision alone.

#### PROGNOSIS

Osteogenic sarcoma has a very high mortality, and this is particularly true in children who seem little able to withstand the disease. Among the sixty-seven cases of reported five-year cures of osteogenic sarcoma, but one five-year cure is recorded in the first decade of life. This case is of a girl nine years of age with a tumor of the upper ulna and even here some doubt is expressed as to the diagnosis. One-half of the recorded Registry five-year cures are among those of the second decade of life, most of them of the adolescent period. This would tend to refute the assertion of Kolodny that adolescents offer but little resistance to the disease. However, the incidence of the disease in this age group is high. Approximately one-third of the five-year recoveries are in the age group from twenty to thirty. The incidence in this age group should not be as high as in the previous one. After thirty we should expect the organism to have less capacity for the formation of such tumors and correspondingly more ability to withstand them. The oldest subject among the recorded cures is a man of 73 years with an osteogenic sarcoma of the lower end of the tibia, cured by amputation.

The size of a tumor in proportion to its age has some significance in prognosis. A tumor which reaches a large size without metastases offers a much better outlook than a more highly malignant tumor which forms metastases before reaching a large size.

The position of the tumor in the body, and the point of involvement is of prognostic value. Those tumors in or near the trunk offer the gravest prognosis. In the extremities those tumors which involve the upper end of the femur offer the poorest prognosis, less favorable apparently than those of the upper humerus, possibly for the reason of the thickness of the soft parts about the hip.

Usually sarcoma of the hands and feet is not so aggressive. It is more accessible to surgery and radiation and, therefore, more easily controlled. True osteogenic sarcoma is rare in the hands and feet.

There are 105 registered cases of Ewing's tumor. Nine of these have lived five years or more. The incidence of Ewing's tumor in comparison with osteogenic sarcoma is much less. Kolodny gives the average duration of life in Ewing's sarcoma as three years, and in osteogenic sarcoma as twenty months. Ewing's sarcoma gives a better opportunity for cure as there is a longer span of life in which to do something.

There are, then, in the Registry, 466 cases of osteogenic sarcoma that were treated 5 years or more ago; of this number, 67 cases have lived 5 years or more subsequent to treatment. There are also 105 registered cases of Ewing's sarcoma with 9 five-year cures.

It is difficult, as the Registry points out, to give a percentage of curability of this disease, as the cases are not consecutive and the doctor has a tendency to report only his successful cases. I think we may make a nearly accurate approximation and say that the mortality from this disease is in the neighborhood of ninety-five per cent.

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## OBSTETRICS IN RURAL COMMUNITIES

A. E. BURKHARDT, M.D.  
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Tipton, Indiana

There have been no important fundamental changes in the practice of home obstetrics since the recognition of asepsis some years ago. The unenviable position held by the United States in obstetrics as compared to that of other civilized countries of the world has been pointed out to every physician. Much has been done to improve the situation through clinics, books, and papers in medical journals. It has seemed that the greater part of this information has been relative to the diagnosis and management of pathological cases with particular reference to special procedures and conditions such as malpositions of the fetus, forceps deliveries, version extractions, episiotomies, sterile vaginal examinations, methods of cervical dilatation, and a host of other helpful obstetrical contributions. However, because of the lack of facilities, a very small part of this information is applicable to the out-patient practice of the general practitioner. There is ample room to improve the management of the normal case, and more information should be presented with this idea in mind.

This paper is an explanation of the procedure which we are following in an attempt to improve the practice of obstetrics in rural communities.

### TWOFOLD PLAN

The plan is twofold:

1. To approach as nearly as possible the accepted aseptic technique in obstetrics practiced in any first class hospital.
2. To give the patient this advantage at little or no additional cost.

It is almost impossible to set up the home bedroom for sterile examination and sterile delivery. The time required and the difficulties encountered soon make the attempt discouraging. The several types of anesthetics which are successfully used in the hospital are impractical in the home. It is needless to enumerate the inconveniences encountered in home deliveries as compared to the conveniences found in a modernly equipped obstetrical unit. Any general practitioner will probably agree with the statement that the least enjoyable hours of practice are those spent in attendance upon a tedious and difficult obstetrical case in a house or flat where light, heat, and equipment were inadequate.

Probably no physician considers an average home ideal for the practice of obstetrics. The many and varied conditions met with are apt to lead to carelessness and breaks in technique as far as the principles of asepsis are concerned. The

young physician soon learns that it is practically impossible in rural practice to carry out the sterile technique which he spent months in learning during his hospital training.

Hospital obstetrics, with its many advantages, is preferable to the physician and to the patient. Home obstetrics is a matter of necessity rather than of choice, and is due usually to the prohibitive cost of hospitalization for the average family. Accepting these two statements as facts, we attempted to solve, and have solved in our particular community, the problem of rural obstetrics.

The "set-up" we have is adequate, it is comparatively inexpensive, and it includes the essentials of a well-equipped obstetrical unit. Adjoining our offices there are three rooms, one delivery room and two recovery rooms. These are so located and arranged that they are strictly isolated and privacy is assured.

The delivery room contains a delivery table, set-up table, solution basins, and cabinet for sterile linens and supplies. It is adequately lighted and ventilated, and an even temperature is maintained at all hours. The two recovery rooms adjoining the delivery room are furnished like an ordinary hospital bedroom, including bed, bedside table, chairs, dresser, and bassinette.

At one of the regular pre-natal visits the obstetrical patient is given the following written instructions:

1. Notify your physician at onset of labor.
2. Take a soap suds enema immediately.
3. Bring with you the following:

(Mother)

1 binder  
2 gowns  
Package of safety pins

Toilet articles

(Baby)

2 gowns  
2 shirts  
2 binders  
2 baby blankets  
2 pairs of stockings  
6 diapers

The patient is admitted to the recovery room and prepared. The nurse who formerly assisted at home deliveries is in attendance. A real advantage is now evident. The physician is able to follow the entire course of the labor more closely than would be possible if the patient were confined at home. Necessary examinations are made, observing sterile technique, and if an unexpected emergency arises, equipment and assistance are always available.

When indicated, the patient is moved to the delivery room, draped, and prepared for delivery. A change of sterile linen is available in the event that the delivery is complicated or unusually prolonged. Following delivery, the mother and babe are returned to the recovery room where they are kept under close observation for the first few

hours. The delivery room is thoroughly cleaned, soiled linens removed, equipment washed with soap, water, and a germicidal solution, floor scrubbed, and supplies replenished. Following a normal case, the mother and babe (accompanied by the nurse) are moved in four to ten hours by ambulance to their home where the usual home care awaits them.

The first postpartum visit by the physician is made the second day, and two more visits are made during the usual ten-day period of bed convalescence. The patient is asked to return with her baby for a routine check-up two weeks after delivery. Four weeks later she returns for a final examination.

#### BABY CLINICS

Every four months during the year one afternoon is set aside for a baby clinic. Babies delivered in our obstetrical unit are welcomed, and a record is made and kept for each child. At subsequent visits weight changes are observed, diets checked, immunizations advised, and defects pointed out. The number of attendants at these clinics has been very gratifying.

The success of this plan depends chiefly upon the safety of minimum hospitalization. Immediately one sees that if the patient cannot safely be moved before the customary seven to fourteen days, the expense involved would be prohibitive. Therefore, the question arose, "When can a patient be moved with safety following a delivery?" Several prominent obstetricians were consulted. A few discouraged early moving; others were non-committal. However, two eminent men, after considerable discussion, agreed that transferring the patient to her home soon after delivery would not be harmful. We were unable to find anyone who had had actual experience with this particular problem.

Recent statistical reports show greater mortality in cases delivered in hospitals than in homes; however, one must remember that a large number of these cases were sent to the hospitals because of known pathology.

Puerperal fever causes more real concern than perhaps any other complication in obstetrics, and it is especially feared in large obstetrical wards because of the highly infectious character of the illness. After one case develops, subsequent cases are frequent in spite of faultless technique. The plan of minimum hospitalization, as already stated, prevents the development of a case of puerperal fever in the obstetrical quarters. It may be said that every case receives early and complete isolation from other patients. We believe that all obstetrical statistics in relation to infection would be materially improved if patients were removed from hospitals within a day or two following delivery.

#### ECONOMY

Considering economy from the standpoint of the patient: The patient is given obstetrical care

which will approach, as far as asepsis is concerned, that practiced in all leading hospitals at practically no increase in cost over home care. The only additional expense is transportation from the delivery unit by ambulance, and certainly this is amply compensated for by the elimination of the confusion and mess which usually accompanies the home delivery, and by the satisfaction of having a physician and a nurse in constant attendance.

From the standpoint of the physician: The cost of each delivery, once the original set-up is established, is small. He is able to follow the obstetrical case closely throughout labor without leaving his offices. He is free to engage in routine office work if necessary, although he must avoid treating infectious cases while attending a patient in labor; however, there are many other duties that may be safely done such as insurance examinations and consultations. The cash business lost during a year by the general practitioner while he is attending home obstetrical cases will far exceed the cost of equipping and maintaining a modern obstetrical unit.

#### REACTION OF COMMUNITY

That communities will accept this change in the practice of obstetrics is shown by the substantial increase in the number of patients who have asked for this service. Nearly 250 patients have been admitted and delivered. These patients have been moved distances up to twenty-five miles within ten hours and no ill effects have been observed that could be attributed to the move. This number is not sufficiently large to form the basis for conclusive statements, but it is interesting to note that to date no case of postpartum hemorrhage, either early or late, has occurred, and with two exceptions all patients experienced a normal and uneventful convalescence. The two exceptions are reported herewith.

#### CASE REPORTS

Mrs. A., para three, age thirty-five, had been treated before her pregnancy for specific vaginal infection. A small, tender extra-uterine mass in the region of the left tube and ovary was palpable by vaginal examination during the first trimester when the first and last vaginal examinations were made. The patient was admitted, delivered spontaneously without examination, and removed to her home after ten hours. Chills and fever followed in thirty-six hours, accompanied by low abdominal pain. On the seventh day a large mass was palpable abdominally, occupying the entire lower left abdominal quadrant. The patient died on the ninth day following delivery. No autopsy.

Mrs. B., para nine, age forty-two. Membranes ruptured spontaneously prior to admission; uterine contractions were slight and ineffective during the first sixteen hours, then pains became closer, more severe, and in two hours she delivered normally a

nine-pound infant. Placenta was expelled and inspected. Patient returned home ten hours following delivery, and convalescence was apparently normal until the fifth day when the patient had three hard chills and fever. Examination of catheterized urine revealed many pus cells and two-plus albumen. No abdominal rigidity or tenderness was elicited, and the vaginal discharge was apparently normal. Urinary antiseptics were prescribed, fluids pushed, and elimination increased. Daily routine urine examinations showed progressive improvement. On the eighth day the patient had two chills and high fever. Vaginal examination revealed no acute tenderness or masses, the uterus was moderately enlarged, the internal os was tightly closed, and on digital dilatation a large amount of foul, purulent fluid presented. Drainage was made continuous by use of a rubber tube changed daily. The uterine discharge decreased in amount and offensiveness. The patient is convalescing satisfactorily at this time.

#### COMMENTS

We hope that considerable comment and discussion will result from this brief report. This plan is entirely within the reach of every general practitioner. The equipping of a central obstetrical unit by one or more physicians, especially in the smaller communities where hospital facilities are not available, would prove to be a distinct advantage to the patient and to the physician, and might possibly lower the maternal morbidity and mortality rate. Furthermore, we are convinced that the mortality and morbidity rates of the practicing physician as well as of the obstetrical patient should be considered in the pro and con arguments concerning home deliveries. Were a thorough study made of the common colds, influenzas, pneumonias, and deaths among physicians, we might be shocked to find that many could be attributed to what might be termed "obstetrical exposures."

## SYMPOSIUM: MEDICO-LEGAL PROBLEMS ARISING OUT OF INJURY TO THE PERSON\*

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Into the lives of all men—yes, even doctors—at some time comes the law. Some acquire it through education, some apparently enjoy contact with the law, while others are simply sued. I imagine that most of the medical group feel that they wish to avoid this type of degradation if possible; some others of us enjoy being caught between Scylla and Charybdis—the attorney for the plaintiff and the attorney for the defense. We feel that it is necessary to prove that we are feeble-minded.

This discussion must needs be limited to the compensation and liability cases. We also hope to differentiate between the organic, the functional or neurotic, and the malingering. We cannot expect whole-hearted agreement from you, as a group or as individuals, in the outline of some of these problems, but we express them as our personal beliefs.

In this question, the relationship between the doctor and the lawyer is of primary importance, and it is only through an increased understanding and cooperation that this problem can be solved. I believe the accepted attitude between doctors and lawyers is composed of antipathy, distrust, and suspicion. The law profession hangs to itself. No matter what terms, vituperative and otherwise, opposing attorneys may apply to each other in the court room, when the case is closed, arm in arm they cross the street to have a soft drink together.

Doctors, however, do not show such fraternal spirit except when they are surrounded by lawyers. It is, of course, true that the doctor in court is out of his own bailiwick and feels that he is on the defensive, and that the lawyer does all he can to take advantage of him. It is seldom that one hears a physician say that he enjoys being in court, and I am certain that most of us feel that such an expression is a frank indication of psychopathic tendencies. I believe that most physicians actually dread and fear court appearances, and that this fear is based on the lack of knowledge of what is required of them and of what their rights are. This fear is easily understood because only occasionally do lawyers make an effort to explain the situation to the doctors or to tell them what is expected of them in court.

And what of the reaction of the lawyers toward the doctors? Deep down in the legal heart rests the firm belief that doctors are either dumb, dishonest, or willing to testify on either side of a question. The insanity plea in criminal courts

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\* Presented before the Indianapolis Medical Society, April 21, 1936.

has done a great deal to firmly implant this thought. It is not with criminal law that we are interested, although in passing credit must be offered to many of our judges because of the sincere attempt to eliminate this type of medical testimony. In the appointment of physicians to act as friends of the court, they have done much to aid the physician in testifying, as well as to avoid deserved newspaper criticism.

Only too frequently court action has its beginning in the minds of the doctors or lawyers. All of us know that malpractice suits arise from the thoughtless words or slightly unconscious jealousies of some medical man. It is far too easy for one of us to speak slightly of some previous diagnosis or some apparent failure of treatment. We all like to feel that we are correct and that the other doctor may be at least slightly mistaken. In compensation and liability cases, the ever-ready maliciously malignant medical tongue can stir up trouble and produce in the claimant's mind the thought that he has been unfairly treated or that greater compensation is due him. Unfortunately, many of us, in treating patients, are prone to enlarge upon the symptoms and dangers in order to make our really simple cure seem more miraculous. One can recall the doctor that arrives just in time to prevent the patient from going into typhoid fever. Only too often in bland innocence we suggest symptoms and complaints to the patient in our effort to obtain a complete record, and there are implanted in the patient's mind subjective symptoms that remain long after the examiner himself has passed from the scene.

The attitude of the lawyer in agitating a medico-legal dog-fight approaches close to normalcy. It is all good business for him and it is here that the element of professional jealousy enters in. At least the medical profession cannot be accused of a great amount of gain by agitating court action, but this is practically always true in regard to the lawyers. The sheet anchor of the medical profession, in facing this problem, is the fair and honest presentation of scientific facts. In order to regain the proper standing for medical testimony, we must present the facts as they appear in our examinations and not be ruled or influenced by our emotions. On the other hand, at times our treatment by the legal profession is hardly fair. We are asked to make dogmatic statements and give definite prognoses which at the best are nothing more than guesses. They expect us to be far more concise and accurate than we can possibly be. Our precedents are too variable, while those of the legal profession are entirely too fixed.

It must be admitted that neurosis or, if you must, traumatic neurosis, is probably the largest single group of medico-legal cases. Very few cases applying for compensation are entirely free from some element of neurosis. Even when we are dealing with the most clear-cut organic case, only too fre-

quently there is superimposed a neurosis of some type or other, and I believe that this is the most difficult problem to solve in all medico-legal work. Not only is it difficult to evaluate these cases and to dispose of them fairly to all concerned, but the therapy is equally difficult to direct. This therapy can and should be both preventive and curative. Many corporations are famous because of the absence of neurosis among their claimants. Fair treatment of the employe and the absence of brow-beating or coddling by the foreman and mothering by the personnel man contribute largely to this attitude.

When a neurosis develops, the problem is chiefly medical, and don't think I am advertising when I insist that it is rather purely psychiatric. Neither do I say that I can always cure them—like replacing an amputated leg. Many medical men will belittle traumatic neurosis; and only too many of them express the desire to know nothing regarding it, lumping all these cases in one of two groups: either fakirs or crazy people. Neurotics have been termed unconscious fakirs, it is true, but the real neurotic is an entirely different animal from the malingerer, just as he is equally distinct from an actual psychotic. This faulty idea is not confined alone to medical men because I have heard capable lawyers deny the existence of such a thing as traumatic neurosis. They have insisted that the claimant is a fakir just as long as there is nothing of an organic nature discovered. It is needless to say that most of the men who uphold this attitude are defense attorneys. The opposite opinion is just as frequently held by night school lawyers whom some rudely call "ambulance chasers."

All of you have seen cases of alleged injury where, according to the attorney's opening statement, the patient is so badly damaged by some alleged accident that it is remarkable that he is able to come to court. In fact, an interesting sidelight illustrating the twists of the great legal mind is seen in liability cases where the plaintiff is brought in on a cot to writhe and groan before the jurors. If the patient happens to be a woman, great care is exercised in the absence of rouge and the application of large amounts of powder. Backing up this picture, the plaintiff's physicians testify that the alleged accident has produced this great mental anguish, giving reports which show choked discs, gastric ulcers, brain tumors, chronic cystitis, and possibly dandruff. Following this, the defense physicians report that the patient is in sound and robust health and as fine a physical specimen as they have ever seen. If, in this instance, we are dealing with a case of true neurosis, both sides are absolutely wrong. It is true that the defense men find no evidence of organic disease or of any organic residuals of the alleged accident. That, however, does not mean the patient is not ill or has not been injured. However, the report of the plaintiff's physicians must be considered

a little more malignant because they are reporting findings that are not there. Usually, however, the plaintiff's physicians lean upon the subjective findings. They name the complaints, state clearly that they were not present before the accident, and admit candidly that they do not know what is the existing pathology. Their simple statement that the claimant was working, was injured, and now cannot work, carries far more weight with the laity than the negative answer of the defense. I do not want you to think that the above outline is by any means an exaggeration. I think all of you have attended court cases where such extremes of medical testimony have been brought before the Industrial Board or before the jurors.

Only recently I heard the evidence in a case where an attempt was made to enlarge upon the complaints. This attempt was made not by the physicians but by the plaintiff's attorney. A young woman had received a rather severe blow on the right side of her head. She was not rendered unconscious; she continued working throughout the day although she suffered from considerable head pain. She did not go to work the following day and was examined by a physician who reported that he found no evidence of injury, and by that he meant of an organic type. However, he believed that the patient was suffering from an actual headache. This persisted over an extremely long period of time, and finally the case was heard by the Industrial Board. The physicians all felt that it was possible for this girl to have an actual traumatic headache or at least to be suffering from a mild neurosis. However, when the plaintiff went on the stand, the attorney brought out many bizarre symptoms such as the tongue protruding to the left and various paresthesias that could have been due to organic disturbance of the brain. Tests made in the court room proved that no organic residual was present. The plaintiff lost the case because the hearing member believed that if she were lying about these complaints, she might be lying about the headache.

On the other extreme, a man had fallen about twenty feet, striking upon his heels, fracturing both *osse calcis* and producing a very severe cerebral edema with possibly some hemorrhagic areas in the brain. He was unconscious for quite a time. At the time of the Industrial Board hearing, he had an extraocular palsy, some facial weakness, and some optic atrophy. Two physicians for the defense testified that the man was permanently partially impaired by this accident, and were followed by one who testified that there was nothing wrong with this man in any way. It is impossible to conceive of such divergence of opinion being entirely honest. It could not possibly raise the standing of the medical profession in the eyes of the hearing judge.

The malingerer is consciously aggressive and acquisitive—a grafter at heart, with no unconscious element. The neurotic can have a mixture of the

conscious and unconscious, but show to the outside world the same desire. Marked hostility can be seen in either type of case. A malingerer knows that he is open to suspicion and is naturally resentful and on the defense. The neurotic just as firmly believes that he is subjected to imposition, and that all the world is against him.

In order to trace how neurotic disorder often becomes such a complicating factor in the settlement of personal injury claims, let us follow what frequently happens after a medical examiner reports to the insurance company who employed him that the claimant's disability is not of an organic nature and that it could not have been caused in a physical sense, at any rate, by the alleged etiologic event.

The attorney for the defendant, fortified by the examining physician's report, refuses to settle the claim, or at best, offers a settlement much below the claimant's expectation and desire. The claimant then seeks counsel who secures for him other medical examination. If this examiner sustains the opinion of the first, the case may be dropped on the sound advice of the attorney employed by the claimant. Only too frequently, however, a still-hunt is conducted by the claimant's attorney until a physician is found who sees the claimant's disability in a different light and whose report sustains the claim. Then to court and the fight is on.

Why do we find such opposed and diversified medical opinions? Of course, difference in opinion makes for arguments and law suits. However, it is hard to realize that one injured person could give such different findings on separate examination. We must consider motives for a moment at least. If we, as medical men, do not raise the question of honesty, you can be sure our legal brethren will—either behind our backs or in open court. I am sure that only occasionally there is deliberately dishonest medical testimony, but we must admit that it can and does occur. We need not concern ourselves with this because there is little we can do—other than clean our personal skirts—unless our medical societies are a little firmer in their committees on membership and ethics.

Next, we must consider the honest difference of opinion—the personal equation in the observation and evaluation of both subjective and objective findings. It is true that all of us see cases in practice where the diagnosis is evident—where there can be no disagreement. On the other hand, these cases which we are discussing—the ones that come to court—are frequently obscure, and the experience and knowledge of one man may point toward one diagnosis, with at least a slight variation coming to the mind of the other examiner. We see this in every branch of medicine. Can any of you imagine two orthopedic men agreeing accurately and exactly on the length of disability following a broken leg—particularly if one of them is the attending surgeon? To be sure, there are certain

recognized time limits present in such a case, but this is the simplest of medico-legal problems. Any accident which causes the loss of a member or the total loss of function of a certain part of the body presents a problem that can be readily settled. Although the percentage of impairment of any given case has always been a great mystery to me, I can conceive of certain degrees of impairment being accepted for the loss of an eye or a limb or a foot. But where are we when we attempt to evaluate the impairment or even disability of a neurotic? Who can give an accurate prognosis, or can state dogmatically whether the disability is permanent—whether the patient will have ultimate recovery?

There has been a tendency to speak of these cases as *compensation neuroses*, and a favorite statement has been that the patient will be cured as soon as a greenback plaster is applied. No wonder the jury must smile when one side says the neurotic claimant is impaired 100% permanently—and the other finds him 100% perfect. True, it is in the field of neurosis that we see the greatest variation.

The field of functional nervous disorders is a most confusing one. Too long, medical men have ignored or have been ignorant of this condition. In the past, traumatic neurosis has been called concussion, spinal concussion, railroad spine, hysterics, malingering. It has been considered as everything from gross organic disease to outright faking. And because of this lack of knowledge, we have our divided opinions and weird legal decisions. Today, I think all of us must admit and accept as an entity traumatic neurosis. True, we may believe that the injury or alleged injury cannot be the entire cause of the clinical picture. Psychoanalytic investigation and observation shows that environment and family conflicts have far more influence on the patient's mental state than could the accident.

In most court cases, the family or attending physician is placed in a most trying position. Consciously he is interested in his patient—anxious for his diagnosis and treatment to be sustained, for his case to win, for his bill to be paid. I think very few of us can be considered absolutely unprejudiced—entirely unbiased. Too often, it becomes a sort of game, and we cannot help but want the home team to win. However, it is the exaggeration of this bias that has put medical testimony in such bad repute. Neither the doctor for the plaintiff nor for the defense can cast the first stone.

The medical man appearing for the defense is usually a specialist. His position in court is far easier. He can avoid general questions and is, in all courts, permitted to stick strictly to his specialty. His habit of thinking is influenced by seeing the side of the defense. It is usually upon his advice that these cases are fought in court. I think you will all admit the absence of prejudice

in such a position would indicate a most unusual medical man.

I wish now to cite a case in which practically all of these problems were present. The man was seen by numerous medical men and the diagnoses, treatment, and prognoses were just about as numerous.

A young man, employed as a skilled mechanic, was injured in November of 1933, when a heavy piece of metal fell on his left foot, crushing the middle toe. Although he suffered considerable pain, he continued to work after first aid had been rendered. This uncomplaining attitude was characteristic of the patient. The puncture wound healed poorly and further examination was made. It was found that the bone was crushed, causing hyperextension of the middle toe. Because of this hyperextension and the patient's continued use of the foot, a blister developed on his toe, followed by an acute infection with a high fever and delirium.

About three months after the accident, he was brought to the Methodist Hospital in Indianapolis, where the toe was removed. Minute examination of the wound showed a few dark, foreign particles driven deep down into the foot. These were cultured, but showed no evidence of tetanus. On the morning following the amputation, the patient developed a severe spasm of the toes, foot, and leg. The toes were all in extreme hyperextension and have remained that way ever since.

At that time a diagnosis of tetanus was made and he was given 5,000 units of antitoxin. The spasm in the leg and foot continued. About a month after being admitted to the Methodist Hospital, he had a generalized attack which was not observed, but according to his description, he felt numb over the entire body. This frightened him considerably, and he felt that he was dying. He broke out in a cold sweat and cried for help during this period.

The neurological examination showed the deep reflexes of the arms and the right leg to be prompt and within normal limits. It was impossible to elicit the reflexes of the left leg. The muscles were tremendously contracted and, although there was some rhythmic jerking, there was no period of actual relaxation. The position of the toes of the left foot resembled a positive Babinski, but they were permanently in this position. At that time there were varying and rather spotty areas of anesthesia.

Shortly after this, it was decided to examine the spinal fluid. The needle was inserted without difficulty, and the patient seemed to have no discomfort. When pressure was applied to the neck vessels, the patient went into a severe convulsion. This began in the left side of the body and soon became generalized. I suggested that an encephalogram be done. The patient was unusually cooperative, stating time and again that he wanted to regain his health and was willing to submit to

any sort of medical or surgical procedure. No difficulty was experienced in making the encephalogram until about 25 c. c. of air had been injected. At that time another convulsive attack came on.

He remained at the hospital until early in June of 1934, and during this period had ten or twelve attacks. It is strange that the patient always maintained that he did not lose consciousness. He insisted that he was aware of everything that was going on about him, but could do nothing. He admitted that he was always tremendously frightened by these attacks. Another examiner, in questioning him concerning these, asked him if he had any idea concerning the cause. He told this examiner that it was just due to nerves or, as he said, a form of hysteria.

The patient was seen in March of 1935. He was brought to the Methodist Hospital suffering from an injury to the right eye. He stated that early in that year, without any apparent cause or reason, the rigidity of his left leg began to improve, and he returned to work. He had been working for several weeks when a small piece of metal struck him in the right eye and injured the cornea.

Nothing further was heard from the patient until November of 1935. He was then seen at his hometown hospital. At the time of the examination, his own physician, his attorney, and a friend were present. An attempt was made to start the examination without the attorney, but the patient immediately rebelled. He had been in the hospital at that time for more than seven weeks. According to the family physician, during the summer superficial skin lesions had developed on the left leg. These were bullous and later became ulcerated. They were first on the anterior surface, but some of them were found on the posterior portion of the leg. At the site of these lesions, as they healed, considerable pigmentation had occurred. At the time of my examination, the pigmentation was very diffuse and very marked. There was a large superficial ulcerated area about the middle of the leg below the knee slightly lateral to the tibia. The lesions resembled nothing so much as a well advanced and long standing rupial syphilis. There was anesthesia of the entire leg. The deep reflexes could not be obtained. There was marked spasticity with the rhythmic movements which had characterized this extremity since early in the disease. There was also a rhythmic tremor of the right leg when any attempt was made to manipulate the left one. I was not able—either by manipulation or massage—to relieve these muscles at all. At this time the patient's entire attitude was changed. He was mildly antagonistic and openly resentful.

When once the marital and environmental conflicts in this man's life were discovered, it became evident that we were dealing with a very profound case of anxiety neurosis, and in this case compensation had a very limited bearing on the development of the psychopathological situation.

In conclusion, let us suggest some possible remedies. From the medical viewpoint, they can be divided into prevention and cure. Prevention lies chiefly with the employer. I have mentioned only the harmful attitude of a foreman or a personnel man. This attitude can be reflected throughout the entire organization, and the employer's physician, specialist, or examiner can contribute to the development of a neurosis by his attitude toward the patient. Like the comic strip character, he can harm by belittling, just as the too friendly family doctor can overemphasize understanding and sympathy. Real understanding—intelligent understanding—is the backbone of true medical aid.

In some plants, absence from work due to illness or injury produces fear and a sense of guilt in the employe. He is led to believe that any such absence is viewed with suspicion and that if it continues too long, he is guilty of disloyalty. This thought immediately increases the emotional disturbance and is productive of neurosis.

We are lax in our observations in that too often the mental picture is full blown before it is recognized. We should not wait for the appearance of the full blown neurosis before we see we have more than a sacro-iliac strain or fracture of a transverse vertebral process on our hands. Perhaps thyrotoxicosis may develop following a sprained ankle—or Parkinsonism come after a herniotomy—no one knows the limits of medical imaginings—but we must know and admit that always in the background of every injury lurks the possibility of a neurosis. The appreciation of the possible development of a neurosis must be accepted by our medical men, and every attempt made to prevent its full development.

821 HUME MANSUR BUILDING

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Members of the medical profession have achieved an increased importance in the courtroom. Litigated cases concerning personal injuries have grown in numbers and importance under the conditions of modern life. Doctors are necessary witnesses in developing the evidence concerning personal injuries. Doctors as well as lawyers have a real responsibility in such cases.

In assessing such responsibility it will be well to remind ourselves of the purpose of a law suit. Fundamentally it is the method evolved by organized society for the purpose of administering justice among citizens according to rules of law recognized as just and equitable. Our courts are the most important part of our civilized government. They protect our property, they protect our means of happiness, and they protect our very lives. Whenever we step into a courtroom we should be mindful of its high purpose and our demeanor should be in keeping with its function,

Too often we lose sight of these important fundamentals. Lawyers are too prone to forget their duties as officers of the court and resort to tactics of the prize-fight or wrestling match, expecting the judge to do nothing but act as a referee between the contestants. The trial of a law suit is not primarily a battle of wits; it is a seeking after truth so that justice may be done. While the lawyer owes a duty to his client to see that the facts favorable to his cause are presented and that the court properly understands the law applicable to the case, he has a higher duty to the court to see that the facts are truthfully presented and that the judge and jury are not misled.

The duty of the doctor when called as a witness is equally exacting. Indeed the duty of the doctor as a witness is peculiar. He is called upon to testify not only as to the medical facts within his knowledge from observation but also as to his opinion as an expert concerning the effect and significance of such facts. As an expert he is expected to help the court and jury interpret and understand the medical facts developed by the testimony and to reach a proper and correct conclusion from such facts. As such expert witness the doctor is not an advocate zealous to help one side to win; rather he should be as a judge carefully and impartially weighing the facts and giving his conscientious opinion concerning their effect or consequences. Whenever the medical witness abandons the impartial attitude of the expert and assumes the position of a partisan, he not only stultifies himself but loses his value as an expert.

In the discharge of their respective duties it is essential that doctors and lawyers work in close cooperation. Cases arising out of injuries to the person present many problems which challenge the best ability of both professions.

Generally speaking, cases involving personal injuries can be classified as follows:

1. Negligence cases, such as automobile accidents, accidents in business operations and accidents occurring on premises;
2. Claims against dealers or manufacturers because of injuries from the use of foods, cosmetics, wearing apparel and other products bought from such dealer or produced by such manufacturer;
3. Claims against doctors for malpractice;
4. Claims on insurance contracts; and
5. Claims for compensation by employes under the provisions of the Workmen's Compensation Act.

While personal injury cases fill the courts' docket and claim much of the courts' time, they constitute a small percentage of such cases coming to the attention of doctors and lawyers. A large percentage are adjusted and settled without any suit being filed in court. The responsibility which the doctor has in such cases is no less than his responsibility as an expert witness.

The doctor's primary duty of course is to rehabilitate the injured person and restore him promptly to his place in society as a useful citizen. No doctor worthy of his profession would prolong a disability or increase an impairment for the purpose of aiding his patient pad his claim for damages. Of course the claim which the injured person is asserting against the party who caused the injury is a matter of great importance to the patient and the attending physician cannot and should not ignore it. The doctor's duty in that regard is clear and definite. He should be frank and fair in advising his patient exactly as to the nature of his injuries and their probable consequences. He should neither exaggerate nor minimize. The patient is entitled to a doctor's best judgment in that regard but there the doctor's duty stops. The doctor who goes beyond that point and tries to advise his patient as to what damages he is entitled to receive, whether he should settle or whether he should sue, is assuming a responsibility beyond his profession which is unwarranted, unjustified and often harmful to the best interests of his patient. I am glad to say that according to my own observation it is seldom that an attending physician oversteps the bounds in that regard. Generally the doctor concerns himself with curing the patient and leaves the question of adjustment, settlement and suit to other hands.

In this state claims and cases arising under the Workmen's Compensation Law are under the strict supervision of the Industrial Board. As you doubtless know, under this law workmen are paid a certain percentage of their wages during their inability to work if they are injured by accidents arising out of and in the course of their employment. In addition to the above the law has set up a schedule of weeks to be paid if a permanent injury or death results. The amount paid during the incapacitation period is deducted when payment for a specific loss is made. All compensation agreements for the payment of compensation must be approved by the Industrial Board. In all agreements calling for payment of compensation because of a specific loss, a doctor's certificate showing the extent of the injuries and amount of loss occasioned thereby must be attached. Since the Industrial Board has a record of the accident and injury from the very happening, the specific agreement and doctor's certificate are carefully scrutinized, and if the amount of loss agreed on is not compatible with the described injury and does not measure up to the experience of the board members in similar cases the defense representative is told that the agreement does not seem adequate and its approval will be held up pending further medical opinion. However, this condition rarely occurs because defense representatives usually attach certificates of the employe's personal doctor, whose opinion most of the time is in accord

with the one of the doctor who has examined on behalf of the defense.

During the course of a year I estimate that the Industrial Board hears approximately 2,000 cases, most of which involve medical questions. Because of their experience the members of the board have a good general medical education, and according to a number of the leading men of the medical profession their awards indicate an ability to segregate the good medical findings and opinions from the bad. It is not often, therefore, that justice miscarries in cases heard by the Industrial Board, notwithstanding the many difficult medical problems that are presented to them for determination.

Even though the theory behind the Workmen's Compensation Law is to compensate injured workmen because of accidental injuries, many attempts have been made and are still being made on behalf of workmen or their dependents to collect compensation for plain ordinary health ailments, such as gallstones, appendicitis, kidney ailments, stomach ulcers, tuberculosis, pneumonia, syphilis (brain or otherwise), gonorrhea, impairment of sight or hearing due to sinus infection or other causes not connected with trauma, multiple sclerosis, paralysis agitans, brain and spinal cord tumors, thyroids, and many others. The medico-legal problem in the last mentioned connection is not difficult to handle because one does not usually encounter reputable doctors and lawyers urging such type of cases. Usually they are supported by lawyers and doctors with questionable standing and I have observed that the leading medical men in their respective specialties are more than generous in their aid to defeat such cases, thereby keeping the generally accepted scientific medical facts and opinions respected and on the high plane in which they belong.

The compensation law, like the law in ordinary damage cases, recognizes that an injury may aggravate and accelerate a pre-existing latent disease. If it is shown, therefore, that the pre-existing disease is capable of aggravation and acceleration, and it is further established by competent medical authorities that the disease was in fact aggravated and accelerated, compensation must be awarded. In this connection the Industrial Board, by virtue of their many years of experience in cases of this type, and recognizing that certain lawyers and doctors have been wont to say aggravation and acceleration about any diseased condition, weigh with a great deal of deliberation the evidence with regard thereto. To them you have to show preponderantly not only that the diseased condition was capable of being aggravated and accelerated, but also that the violence complained of was sufficient to effect the result.

In cases brought against insurance companies direct to recover weekly or monthly indemnity because of an accident, health or disability contract, the amount recoverable and the duration is specified in the contract. In an accident contract

a clause generally to the effect that:

"Liability for disability benefits or for death attaches only if disability or death results directly and solely from bodily injuries sustained through external, violent and accidental means, independent and exclusive of all other causes."

is contained in such contract. The Federal Court rule in this connection is different from the State Court rule, the effect of the Federal Court rule being that the clause in the contract should be strictly construed and that it means exactly what it says. In other words, even though there be an accident, if all the evidence fairly shows that the disability or death was not due solely to external, accidental and violent means, but instead is due to a combination of a diseased condition and the accident, no recovery can be realized. The effect of our State Court rule is that it is a question for the jury to determine whether the accident and injury are the proximate cause of the disability or death. So, if a jury finds from a preponderance of all of the evidence that the injury, regardless of how slight, is the proximate cause of the disability or death, notwithstanding any disease or combination thereof which the policyholder may be suffering from which really is the cause of the disability or death, they are at liberty to find for the plaintiff. Thus, a frequent medico-legal question in suits under this type of contract is whether the disability or the death is caused by external, accidental and violent causes independent and exclusive of all other causes. With this question of course goes that of cause and effect between the alleged accidental occurrence and the disability or death. Under this branch of litigation there often arises an honest difference of medical opinion among reputable doctors.

The medico-legal question in dispute under disability and health contracts is the duration of the policyholder's disability, if any at all. In these cases also arise honest differences of medical opinion among reputable doctors.

In all the other types of cases enumerated, namely the damage cases, the amount of recovery, if legal liability is established, is for the jury to fix. The jury alone passes finally on the extent of the injury and the probability of its permanency, after they are told about it by the medical witnesses. The usual lay jury is composed of persons not possessing experience in handling medical cases, so sometimes justice gravely miscarries in these cases, principally because of grossly erroneous medical testimony. Both doctors and lawyers are to blame in such cases. The lawyers are to blame because they know certain doctors whom they employ regularly who are willing to testify in accord with the desires of the attorney and his client. The doctor is to blame who aids and abets in any case in obtaining undeserved compensation by reason of dishonest, illogical or distorted medical testimony. The doctor is sup-

posed to know and should know the medical facts of the case. His testimony should be concerned only in the giving of such facts and nothing else.

Under all classes of litigated cases discussed, cases arise involving medico-legal problems which may be properly characterized as most difficult and elusive. Cases involving these problems have noticeably increased during the past several years of economic distress. The cases just referred to are the ones involving neurosis and malingering. The lawyers in these cases are helpless, and without the aid of competent medical assistance cannot possibly prevent justice miscarrying. The problem usually presented in such cases is, does the plaintiff suffer from a true neurosis, and, if so, is it connected with the accident, or is the plaintiff a pure malingerer? The true answer to such problems is extremely important because in a true case of neurosis the law recognizes liability while in a case of malingering it does not.

In a considerable number of cases, after an accident, either a damage suit is started or a claim for compensation filed. Claims are made by the plaintiff that there is some loss of power so that he is unable to walk or raise an arm, or that he cannot see or hear, or that since the accident he is suffering from convulsions or other pain, or that he has lost feeling over some part of his body. In many of these cases physicians examining the plaintiff or claimant report their inability to discover any organic cause to account for either the paralysis or loss of function of the special senses, or in fact any of the complaints registered.

In a considerable number of other cases, after the occurrence of the accident, however slight, and the filing of the damage suit and the claim for compensation or insurance disability, the plaintiff complains of many subjective signs, such as headaches, various pains, none of which are localized, loss of appetite, nervous indigestion, with constipation, backache, and various other symptoms. Examining physicians in these cases report that the symptoms are subjective only, the existence or non-existence of which cannot be proved.

Investigation of the first group usually discloses very unsatisfactory environmental surroundings, such as financial distress, unhappy family relations, discontentment with the place of employment, and failing business, etc. Investigation further discloses that the blindness, paralysis, and the other manifestations mentioned, are likely to disappear suddenly.

Investigation of the second group usually reveals that the plaintiff, if he is satisfied that he is not being watched, will engage in some gainful work and will do many other things incompatible with his subjective complaints.

It is these cases that present the most difficult problems and in which there is more apt to be a miscarriage of justice.

The differential diagnosis and the answer to the problem present in both groups properly are

for Drs. Smith and Hahn. That both groups require skilful, psychological medical handling for their rehabilitation in order to protect industry and society, let alone the victim, is obvious.

#### 751 CONSOLIDATED BUILDING.

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In an early opinion the Appellate Court said that in the administration of the compensation law, much dependence would have to be sought from the medical men. Experience has sustained this obvious observation of the court. The court might well have gone further and pointed out that the administration of the law would be coupled entirely with human beings and that all the complexities, hallucinations and absurdities of old homo sapiens would intrude in one form or another. Perhaps the one static factor in this world of ours, outside of death and taxes, is human nature. Behavior changes to meet different phases of political, economic, and industrial setups; methods and means and styles vary as occasion demands, but human nature does not seem to be anything but human nature whenever and wherever found. So in any consideration given to the administration of the compensation law here in Indiana we must ever have in mind the one inescapable fact that all that appertains to it is closely connected with what has been with us from the time that our forebears first stood on their hind legs and viewed the landscape o'er. And it does not matter what particular element or unit may be segregated, whether it is the injured employe, the employer, the physician, the lawyer, the adjuster or the insurance company, somewhere hid away will be found the inclination to revert to type. The only unit to which this does not apply is the member of the Industrial Board. He is able to and does shed his skin even as we are told does the deceiver of our first mother. Times change, and men change with them, we are told.

It is a pity that we do not have anything authentic to show us just what was the experience of Hippocrates, during the time the pyramids were in building, if he was there at that time, when one of the boys engaged in laying the stone reported in that he had slipped and strained his back or felt a pain in the groin and later found a bulging. It would be interesting did we have his files in these cases and know whether old Dr. Hippo diagnosed these back afflictions as arthritic in character or scoliosis or what not and that what Exhibit A was suffering from was a coincidence, or did he find that the victim was suffering from an honest-to-goodness injury and that he was muchly impaired. And then was the matter brought before some Justinian of that day and did Dr. Hippo tell his story, either for or against, and did some other practitioner whose name is now lost, tell his story, and did the learned administrator look wise and make a guess, the which

became final and conclusive and right, made so by the fact that he had the last guess? It's a long trek from the tree tops and the caves and the lake villages to the modern surroundings of the Athletic Club. Much has been done since Serophilus, and Hippocrates, and Galen. But human nature persists.

One's attitude toward the administration of the compensation law is going to be tinctured by one's thought as to what the law means and what is its purpose. If one has the thought that through the law an easy way is to be found for disposing of disagreeable occurrences, that this is its main purpose, then one will have a definite idea as to how the law should be administered and what are the means to be employed. This is not my view. Perhaps that I may make my idea clearer as to what is the relationship of the medical man to the law I might give my view. Workmen's compensation is social in its every aspect. In its administrative feature it has two basic thoughts. The first and most important is to provide machinery whereby industrial accidents may be reduced to the lowest possible point. The second is the rehabilitation of injured workmen. Of course the monetary features are not to be minimized; the injured man should be taken care of, and the widow and the orphaned children should not be forgotten. Yet it might be asked, "How far does our Indiana law go in meeting these requirements?" If the rehabilitation of injured workmen is of prime importance, is there much logic in restricting medical attention to thirty days? Workmen's compensation is social in its application. If it is not, then there can be no good reason advanced for its being. It is as truly social as is old age pension or as is unemployment insurance. And some time in the future some wizard with organizing ability is to devise a plan whereby these social activities will be grouped and systematized, and when that day comes some of the problems that now confront us from the medical side will disappear. Personally I think that medical attention under the law should be furnished so long as it is necessary and should be of such character that will bring desired results. In this connection I may say that I have no particular fault to find with the insurance companies and the larger own-risk carriers about this.

To my mind, the most important feature of the act is the medical provision. I disagree with most of the men with whom I have associated during my life. The active spirits among this grouping are opposed to the selection of the doctor being left to the employer, and insist that the injured workman should have the right to choose his own physician. On the surface this appears fair and reasonable. However, if rehabilitation is one of the desired objects, it would seem that the employer, who has to foot the bill in the first instance, would be more interested in seeing that one qualified for the particular task at hand would be selected. It is no disparagement of the mine

run of doctors to say that some are better adapted for certain work any more than to say that certain lawyers are better equipped for varying phases of legal work. Our family physician is all that we want him to be; but I doubt, if occasion should arise necessitating some delicate surgical operation, that this physician in whom we have all confidence would take over the job.

Much of the opposition to this selection of the physician runs to the hearing of contested cases, it being contended that the injured man is at a disadvantage in that the attending physician is always found testifying for the defendant in these cases. This is one of those things that is more apparent than real. There can be no dispute that the defendant does have, as a rule, the physician who has attended the injured man. And it likewise is true that the evidence submitted is generally favorable to the defendant's contention. I suppose this can be explained in that where there is a contested case the employer or his representative has consulted with the physician before action is started. Personally speaking, generally I do not believe that the doctor comes before the board to testify for the defendant. I rather think the doctor comes before the board to tell what he knows of the case. If this is not so, then it must likewise be true that the doctor for the plaintiff comes before the board, not to tell what he knows, but to testify for the plaintiff. In either event, if such be the disposition of the doctor, then this can be of no benefit to the board in arriving at a righteous conclusion and the thought of the Appellate Court must go into the discard as just so much theorizing.

My own opinion, based on my observation on thousands of contested cases, is that the doctor is honest. There have been some instances in which I have had my trusting disposition slightly shattered, but these have been so few that the net total is all on the side of good sportsmanship. Not that I want it understood that I always agree with my friends among the medical men, for this would be impossible. When there come before me doctors of learning and great perspicacity, and these same aforesaid learned gentlemen differ as the poles, it becomes just one of the impossible things of life to reconcile these conflicting views. In such a case the work of the board member becomes quite easy.

Mr. Donadio has recited that the board in the course of a year will hear some two thousand contested cases. During the past five years, although the number of industrial accidents sank to a low level, those for the year ending 1933 being less than 11,000, the number of contested cases showed no particular decrease. This was traceable to the depression, to the human instinct perhaps to hold fast so long as possible in the case of the one receiving compensation and to the closer attention being paid outgo by the carriers. However, these last years have been abnormal years.

During normal times there are between 45,000 and 50,000 accidental injuries recorded each year. Now each one of these recorded accidents means that the injured has lost more than one day's time. This also means that in each accident some sort of medical attention was required. From these accidents there flowed agreements that ran into the 40,000. An agreement is just what its name implies; it is indicative that the injured workman and the employer have agreed that there was an accidental injury, succeeding disability exceeding seven days, that the injured was receiving medical attention to the extent necessary. Since the law became operative in 1915 up to last July 1 there have been 331,000 agreements approved by the board. In that same period there have been 35,000 contested cases. Of these contested cases a fair estimate would be that at least from one-third to one-half were contested on matters other than that in which the medical man played any part. In other words, a large part of the contested cases are predicated on whether the accident claimed arose out of and in the course of the employment. Granting that one-third would be a fair estimate, it would follow that in the twenty years in which the board has been hearing cases there have been about 20,000 in which doctors have submitted testimony. Now, in the settlement by agreement of the 331,000 compensation allotments, medical opinion was likewise necessary. Or in other words only between 7 and 8 per cent of all medical opinion is disputed in the awarding of compensation under our law.

Under our law the doctor is clothed with considerable responsibility. I have been associated with every man who has ever served as a member of the Industrial Board, and some of these board members I think were wise in their day and generation. Yet with all the veneration I have for their shrewdness I must confess that I do not believe any one of them was beyond being deceived. As I have said before, we are dealing essentially with mortals. Unfortunately, the bulk of that with which we come in contact comes from the less fortunate stratum of the industrial world. I have no statistics, but it seems to me that the skilled mechanic suffers less from industrial injuries than does his less favorably situated brother in the unskilled callings. We can not close our eyes to the fact that environment has much to do with one's outlook on life, with one's prejudices and one's opinions. To one who has been deprived of much save the bare necessities it is just natural to form conclusions that those of the uppercrust are in league against all that is down beneath. The more narrow one's life, the more likely is one to be suspicious of motives. Should one who has been born to crusts and husks and who comes within the orbit of the compensation law be any too anxious to terminate a situation that perhaps has been the first vacation with pay he ever enjoyed? One would think not. And yet my experi-

ence has been that there has been comparatively little malingering. True, there has been some. And on the other hand, there has been some malingering on the part of employers, and on the part of insurance companies, and on the part of lawyers—and, I am afraid I shall have to say on the part of some of the medical men. This malingering on the part of the uppercrust would not be called by that harsh and uncouth name. But the purpose was the same—to get something that one was not justly entitled to, to profit at some other person's expense. I think there could be a balance struck between the two extremes. Happily for us, the total is not large.

STATE HOUSE.

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In preparing expert opinions in medico-legal cases, the surgeon frequently has to take neurosis and malingering into consideration. Some knowledge of these conditions is essential in arriving at a correct diagnosis of those difficult cases in which organic lesions cannot be found. To call them "functional" merely because physical injuries have been eliminated is unsatisfactory diagnostic work, for there is no more reason why they should be assigned to the "functional" group *by default* than to the organic. Diagnosis of neurosis by elimination has also often led to serious errors in other fields than the medico-legal.

During the past two years I have carried along as a minor interest a study of these "functional" conditions. The following analysis of the problem they present for diagnosis has come out of that study, and particularly out of instruction in the psychiatric clinic of Dr. N. L. Blitzsten of Northwestern University. I hope it will have some value for those who are interested in medico-legal testimony as well as in neuroses generally.

When all personal injury claimants whose symptoms are due to organic lesions have been put to one side, it is obvious that the remaining claimants are either malingeringers or sufferers from some mental disturbance. The mental disturbance which comes in question in the vast majority of instances is not frank psychosis, which, therefore, I shall not discuss. Rather, it is the border-line condition generally known as neurosis, or psychoneurosis, with which physicians are only too familiar in their ordinary daily practice.

In ordinary practice, however, the question of differentiating neurosis from malingering does not arise. Further, in ordinary practice when neurosis is diagnosed, it is not of paramount importance to determine whether or not a given event caused it to develop. In medico-legal practice, however, these are precisely the points in which the lawyer and the court are most vitally interested. They can best be approached, I believe, by comparing, in

their psychologic structure, the accident neuroses with those of ordinary life.

Cases of neurosis related to claims for personal injury are not fundamentally different from those occurring without such a connection. The same wide variety of symptoms is displayed by them, ranging from neurasthenic incapacity for work, through conversion hysteria and anxiety neurosis, to severe grades of "traumatic neurosis." Although these cases involving compensation claims are clinically indistinguishable from corresponding neuroses seen in other settings, there are two circumstances which may mislead one into thinking that there is something specific in their structure.

First, neurotic compensation claimants almost always refer their disability to actual—that is, organic—impairment. Mr. Donadio advises me that, notwithstanding the compensability of neurosis under our Workmen's Compensation Act, claims frankly based on neurosis as the disabling disorder are uncommon in Indiana. According to Brend,<sup>1</sup> the same situation prevails in England. He advances the explanation that the diagnosis of neurosis gets a chilly reception in court and is likely to lead to a very small award, if, indeed, any is allowed. In my opinion, another reason why claims are rarely based on neurosis is that claimant's attorneys and the expert medical witnesses chosen by them, for one reason or another, consciously or unconsciously prefer organic interpretations—sometimes at considerable cost of scientific accuracy.

Aside from external influences which prompt claimants to interpret their neurotic disability as organic impairment, there are unquestionably internal, psychologic reasons for displacement of the trouble from the mental to the physical sphere. Herein we see that the neuroses attributed to accidents are no different from others, for in ordinary practice also, only a small minority of neurotic patients realize that their troubles are psychogenic. In attempting to get the majority of our neurotic patients to accept psychologic interpretation of their symptoms, we meet the strongest resistances, and quite naturally, considering that the neurotic's flight into illness is undertaken in the first place to deny, conceal, or thwart the emotional stresses of his life situation. Therefore, we may say that obstinate insistence upon an organic interpretation of a disability which in reality is neurotic does not distinguish the accident neuroses from those of ordinary life.

The other circumstance which seems, at first glance, to distinguish the accident neuroses from all others is the conspicuous common feature of claiming compensation for the disability produced by the disease. Actually, however, this factor is found in all neuroses, even though it be deeply disguised, and corresponds with what Freud

called "the secondary gain from illness." By this phrase he meant that every neurosis is sustained by some external advantage, not always financial but often indirectly so, which serves to satisfy the patient's craving for unearned care, security, or support.

Since this relationship between the illness and the environment is an essential feature of neurosis, one might quickly assume that depriving the patient of the "secondary gain" would dissolve the neurotic structure. As a matter of fact, it does sometimes have this effect, particularly if the neurosis is not severe and if it has not persisted too long. Habituation of the patient to a state of dependence is in itself a pathogenic influence. But some neuroses, whether due to chronicity or to strong predisposition, are more malignant and find ways to maintain themselves when the "secondary gain" is denied or withdrawn. What happens in these cases is simply an obsessive search for a substitute for the missed support. Life generally affords something which can stand in that relationship to the neurotic.

For instance, one patient, having relinquished his feeble hold on his wife during his acute neurotic episode which masqueraded as tetanus, betook himself to his uncle's home to live when his claim for compensation was not allowed. His uncle's support relieved his feeling of insecurity so that he was then able to simulate health by looking everywhere for a job—but always in ways which made it certain he wouldn't find one. The "secondary gain" in this case suffered deterioration from a pension, which the patient could have accepted without *obvious* loss of dignity, to a bed under his uncle's roof and a place at his table. This change in the "secondary gain" accompanied a retreat from a situation which had some semblance of independence to one of almost undisguised infantile dependence.

Those who have held that the lure of compensation is the chief or only factor in accident neurosis, have often stated in proof of their theory that the disease is cured by the award. Against them is the fact, everywhere admitted, that the payment of a disability allowance by the pension system serves to support the neurosis, making the cure of it, even by the most skillful psychotherapy, almost impossible as long as the dole continues. Even with respect to the single-payment award, reliable evidence of cures of neurosis, *properly differentiated from malingering*, is not available in the literature.

Among the few definite opinions on the effect of compensation in accident neurosis which I have been able to find, the most favorable is Neuhaus'<sup>2</sup> citation to Collie to the effect that in Denmark lump sum settlement leads to recovery of 93.6 per cent of the cases, whereas in Germany only 9.3 per cent recover under the pension system. Schaller

<sup>1</sup> Brend, W. A. "Medico-legal problems in general practice; neuroses and psychoses in relation to violence." *Practitioner*, 133:741, Dec., 1934.

<sup>2</sup> Neuhaus, G. "Traumatic neuroses." *Nebraska Med. J.*, 19:248, July, 1934.

and Somers<sup>3</sup> state that there are many cures by capital settlement while on the other hand there are occasional instances of improvement by psychotherapy in spite of the continuance of a pension. Hengstler<sup>4</sup> apparently does not regard the award as a cure, for he advocates lump sum settlement in order to provide calm conditions for personality reconstruction by psychotherapy. Hall and Mackay<sup>5</sup> stress the ineffectiveness of the neurotic's personality prior to the acute episode and hold that this is unaffected by a lump sum settlement. Foster<sup>6</sup> advises lump sum settlement but states that it does not always cure the neurosis. Solomon<sup>7</sup>, recognizing the therapeutic ineffectiveness of compensation, advises "at best, a modest lump sum award."

In the absence of reliable statistics, based upon psychiatric follow-up studies, it seems to me that the legend of the so-called "gold cure" should be put aside.<sup>8</sup> Considering the structure of neurosis, it is as illogical to expect to cure it by a financial award as to cure diabetes by supplying the sugar which the patient craves. The temporary relief of a symptom is all that could be expected in either case. (It is well to bear in mind that in malingering, it is a different matter.)

Those who regard the "secondary gain from illness" (i. e., the compensation) as the chief or only motive in the neuroses related to accident, overlook a most important point, namely, the fact that this "gain" may often be of a very poor grade. As we have already seen, it can undergo degradation until it is a gain only by a stretch of the imagination. It must be that other powerful factors maintain the neurosis, forcing the patients to such drastic estrangement from reality that they accept as advantages pitifully small satisfactions of much less value than they could obtain by simply returning to a healthy, active attitude. The physician can see possibilities for their return to gainful employment, but the patients cannot. The neurosis having been established, the patient persists, as though driven by instinct, in accepting niggardly small rewards for passivity at the cost of foregoing greater gratifications obtainable by activity.

Since complete motivation for the illness cannot be found in the patient's outer relations, we are prompted to look within his personality for

<sup>3</sup> Schaller, W. F. and Somers, M. R. "Psychogenic factors and precipitation point in post traumatic neuroses," *J. A. M. A.*, 93:967, Sept., 1929.

<sup>4</sup> Hengstler, W. H. "Functional Neuroses following Injury." *Physiotherapy Rev.*, 14:63, May-June, 1934.

<sup>5</sup> Mackay, Roland P. and Hall, Geo. W. "Post-traumatic Neuroses." *J. A. M. A.*, 102:510, Feb. 17, 1934.

<sup>6</sup> Foster, L. J. "Traumatic Neurosis (relation to compensation)." *Amer. Jour. Roentgenol.*, 30:44, July, 1933.

<sup>7</sup> Solomon, Alfred. "Clinical Classification of Post-traumatic Mental Reactions." *Indus. Med. Jour.*, 2:72, July, 1933.

<sup>8</sup> When capital sum settlement has a favorable psychologic effect it may be because the patient looks upon it as a denial of further compensation. If so, it has the effect of withdrawal of "secondary gain."

causes. Here we find that mental events pursue a devious course in the interest of avoiding unbearable anxiety—i. e., fear. This relief from or avoidance of anxiety is what Freud meant by "primary gain" in neurotic illness. Superficially, to be sure, anxiety is not to be seen in the majority of neurotic subjects, for the symptoms serve to conceal it. In anxiety hysteria, proof of the role of fear can be obtained by interfering with the patient's self-imposed protective mechanism. Force the agaraphobic into the street and he will show every evidence of dread and will report that he feels afraid. In other types of neurosis, however, the dread cannot so easily be brought into consciousness, although maneuvers which threaten the stability of the neurotic adjustment may produce unmistakable bodily evidences of it. For instance, in one of the cases cited by Dr. Smith, an attempt forcibly to flex the spastic leg at the knee produced a series of reactions which could not be explained as reflexes on neuro-anatomic grounds. First, the opposite leg grew rigid; then the trunk began to twist; beads of perspiration stood out on the face; the pupils dilated and consciousness was altered in the manner of a petit-mal attack. All these reactions subsided on stopping the attempt at knee flexion. They could be produced repeatedly by a simple twist of the knee, so to speak. The patient reported after the induced seizure that he had felt no fear or any other mental experience, least of all pain. With this patient, the anxiety which the neurosis had already succeeded in sparing him through the symptom of spastic monoplegia could not be forced into consciousness. However, its presence in the unconscious strata of the mind could be made evident by eliciting this motor expression of a state of terror.

The anxiety which is capable of producing such pathologic effects naturally comes from within the individual. We regard fear as part of the normal reactivity of the personality, but when it is too easily provoked, when unsuitable stimuli arouse it, or when it leads to pathologic mental or nervous activities, we must look upon it as an essential part of the neurotic predisposition. As you all know, the predisposition to neurosis (to some extent present in everyone) is traced by psychoanalysts to the experiences of infancy and childhood.

Since psychiatry finds the actual dynamic cause of neurosis to lie within the personality of the patient, it becomes practically important to inquire what etiologic value may fairly be assigned to precipitating factors. That they play a role is unquestionable, for all cases of neurosis, barring a few chronic ones dating from childhood, are found to date from special events, such as new problems faced at puberty, the menopause, death of a relative, an organic illness, etc. In this respect, the accident neuroses are again no different from

<sup>9</sup> Fenichel, Otto. "Outline of Clinical Psychoanalysis." *Psychoanalytic Quart.*, 1:572, Oct., 1932.

those of ordinary practice, for accidents are in every way comparable, as precipitating factors, to the natural events just mentioned. We have thus come to the question of greatest medico-legal interest: how are accidents to be evaluated as precipitating causes of neurosis?

According to Fenichel,<sup>9</sup> the etiologic importance of the accident must be estimated by its objective upsetting value. A psychiatric judgment is involved here, for the physician must have in mind a standard of behavior within the range of the so-called normal. If a severe neurosis follows an accident which would be trivial to a normal person, a strong predisposition to neurosis must be assumed. If, on the other hand, the accident is of a really shocking nature, objectively considered, the ensuing neurosis must be considered as caused by it to a much greater extent. Thus, the cases can be arranged in a series according to the severity of the latent predisposition to neurosis and according to the objective traumatic importance of the accident.

At one end of the series stand cases in which the accident serves merely as a *pretext* for the onset of a neurosis which had long been in preparation. The neurosis in such a case is really precipitated by some environmental factor or event to which the patient could not make a satisfactory adjustment. The accident is merely exploited by the patient for its camouflage value. Much concern over it and the worry of litigation serve to conceal from the neurotic himself, as well as from others, the conflicts activated by circumstances entirely unrelated to it. In many instances, the interpretation is warranted that the patient goes more than half-way to meet the accident which must then be regarded as *symptomatic* of an already established neurosis.

At the other end of the series stand those cases in which the accident actually was of a kind to overwhelm anyone with terror, and in which the factor of neurotic predisposition is minimal. This is the situation which gives rise to the severely disabling and often permanently crippling "traumatic neurosis," in the restricted sense of the term. It is true that this neurosis occurs only in a special type of personality, but it is a type which does not easily give way to neurosis, and the accident must be rated high as a causative factor.

It follows from all of this that a most important part of the psychiatric work in determining the etiologic importance of the accident in a case of accident neurosis, is a careful inquiry into the patient's whole history and current situation; childhood influences, intelligence, achievement level, sexual life, marital and family relations, interpersonal relations particularly at the place of employment, security of employment, and especially previous evidences of unstable social adjustment. From these facts an estimate may be made of the neurotic predisposition; and oft-times proof may be found of more important precipitating factors

than the accident about which such a fuss is being made.

The other question of great medico-legal importance is how to distinguish between the claimant who is simply malingering and the one who is really neurotic. This question, of course, is one for psychiatric judgment. Dr. Blitzsten has pointed out to me that the cases again fall into an uninterrupted series according to the degree of awareness on the part of the patient as to what he is doing. At one end of the series stand the cases of true malingering in which the subject is entirely conscious of his wish for compensation. Here the "symptoms" are simply lies, insofar as they are subjective, or theatrical imitations, insofar as they are physical. The symptom-picture is a product of the claimant's whole personality, and is produced voluntarily. Therefore, involuntary innervations are not involved. Assumed paralyses are of a highly artificial nature and the claimant's pose is too fixed and unvarying. On the personality side, these subjects are not likely to arouse the sympathy of normal, sensible people, for their affective attitudes are also cut-and-dried. Many people totally lacking in psychiatric training, but who have a knowledge of human nature, can detect them intuitively. However, I am not recommending intuition as a method to be used, but rather careful observation over a period of time for the study of their behavior. Espionage sometimes provides the most convincing proof of their deliberate fraud. Really, these cases of malingering stand outside our series, for there is no neurosis, no disease in any reasonable sense of the word, but only a character disorder.

Blitzsten<sup>10</sup> has recently pointed out how malingering may appear deceptively like real neurosis in some subjects of a special psychologic constitution. These subjects, who are likely to be mistaken for "cyclothymics" (the personality type related to manic-depressive psychosis), are prone to malinger unconsciously. The neurotic picture they present, however, is a flimsy, shallow structure, involving no deeply unconscious mechanisms. Their personality is shot through with fraudulence, and their neurosis is a fraud also. This situation may be detected by observing that they do not act as though they suffered. When loudly claiming to be depressed they are actually merely nagging, not dejected. When they threaten suicide, it is to provoke concern in others or to gain an end. Unless by accidentally going too far with a suicidal gesture, they never kill themselves. On the contrary, they are tenacious of life. Unlike genuine neurotics, they do not suffer, but obviously gain satisfaction in making others suffer. Nevertheless, they display symptoms or complain about them, and are likely to be put with the neurotics when the examiner discovers that their attitude toward

<sup>10</sup> Blitzsten, N. L. "Amphithymia." To be published in *Arch. Neurol. and Psychiat.*

the secondary gain (compensation) involves unconscious mechanisms. The process, at least in some cases, may be sketched as follows:

A wish for compensation not justified by the facts involves a hostile impulse—it resembles intended theft. Fear of retaliation on the part of society prompts its repression from consciousness. Doubtless, to some extent, self-esteem also dictates the disowning of the aggressive wish, for not many are able to acknowledge themselves malingers. But a disowned (repressed) wish is not thereby disposed of. On the contrary, it continues to exercise its force in the unconscious where the wish is always equivalent to the deed. The subject, then, feels as though he had perpetrated the fraud and unconsciously expects retaliation for his "deed," which actually was only a temptation. The anxiety thus arising in the unconscious requires relief which is often provided by the appearance of symptoms. The subject thus punishes himself for his own aggression while projecting responsibility for the illness upon the accident. Now he demands *as an invalid* the compensation which he could not seek *as a malingerer*.

Although mental acrobatics such as these are characteristic of real neurotics, in the group under discussion they do not set up a disease worthy of the name neurosis. The symptoms are too easily cured by a hot spark, in which case the physician may expect no gratitude, for the hostility behind the "illness" reappears undisguised. Dr. Smith recently related to me a case of parlysis of this sort. At the moment of "cure" by static electricity, the patient became violently angry.

Such subjects are afflicted with "psychotic character" (included in the well-known group, psychopathic personality) but they have no neurosis, properly speaking. Furthermore, they have no disturbance consequent to an accident which they did not previously have consequent to a whole series of events which gave them chances, from time to time, to capitalize their nuisance value. There can be no more reason to compensate these subjects for their demanding tantrums precipitated by accidents which did not hurt them than there is for unlocking doors for the convenience of those whose nervous tensions require an occasional burglary. From the medico-legal standpoint, these subjects might as well be classed with the ordinary malingerers and given that label if court procedure requires such designation in order to avoid miscarriage of justice. Psychiatrally, they are psychotic characters with unconscious malingering.

Next in the series are cases of genuine neurosis. Here, the wish for compensation is not specific and primary. As we have been at pains to point out, the compensation plays its role only as a satisfaction of a general need for proof of affection from the environment, or of restitution for a deep sense of injury, or of relief from a grave

feeling of insecurity, etc. Regardless of the precipitating cause, and therefore regardless of the legal compensability, these claimants are sick and suffering. Unfortunately, awards of compensation do not cure them. Quite to the contrary, pensions are harmful. Probably, capital sum settlements adjusted to the actual importance of the accidents as a precipitating cause are not only fair, but beneficial.

Finally in the series come the cases of true "traumatic neurosis" in which the demand for compensation can no longer be considered as striving for "secondary gain" with which to support the illness. The demand for compensation logically follows the development of this disorder, which also was not wished for or self-inflicted. Predisposition to this neurosis is not revealed by a history of previous instability, or evidence of maladjustment in life. On the contrary, these subjects would never be suspected of any neurotic predisposition if neurosis were not fortuitously thrust upon them by a really shocking occurrence. After the outbreak of the disorder, it is easy to see that they were always overly independent, hyper-moral, and excessively proud of these traits. The predisposition, then, is a cast of character which is almost as resistant to the shocks of life as the "normal" one. When these subjects develop traumatic neurosis, they deserve compensation, if responsibility can be attached to some agency, for they might have remained well and independent had it not been for the accidents which by their actual gravity overwhelmed them.

The symptoms of traumatic neurosis, in this restricted sense, are more or less familiar to all, as they have been described in connection with the genuine cases of "shell shock" seen in the World War. It is important to note that they approach the symptoms of actual brain damage seen in the post-concussion syndromes. In many cases differential diagnosis is not easy.

As for the practical medico-legal application of the views I have expressed, there would seem to be no great difficulty when the amount of the award is left to the discretion of a jury. But Industrial Board procedure, I gather from Mr. Donadio's discussion, is more by fixed rule. Medical witnesses may find it necessary, for the time being, to do some violence to scientific psychiatry in order to make their testimony useful to the court. If the compensation law recognizes only rigid categories, the medical witness will need to break the continuous series I have described into useful units corresponding to the diagnostic terms currently recognized.

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JULY, 1936

**EDITORIALS**

**ANNUAL REGISTRATION**

This is written to awaken interest in better administration of the Medical Practice Act.

Under the present law, the only funds available for administration are the fees collected from candidates for license. These fees are \$25 for those taking the examination and \$50 for a license by reciprocity. No money is appropriated out of the general fund. At the end of each fiscal year any balance remaining reverts to the general fund of the state and is not available for the next fiscal year.

It has been the policy for some time to limit appropriations for all special licensing boards to an amount not to exceed the total fees collected by it during the current year. Under this rule the legislature may appropriate any fanciful sum, such as \$10,000 or \$15,000, but if only \$3,000 or \$5,000, or any other sum, is collected, the Board is limited in its activities to spending only this smaller amount. A recent letter from the Secretary of the Board said in respect to this: "In the last couple of years the Legislature has been making a definite budget or appropriation, which has been less than the actual amount of fees received. That is why the Board had to request the Governor to get funds from his contingent fund. In the present year it has been about \$800." In this instance the Board can not spend more than the sum appropriated even though a larger sum is collected through fees. The proposed new registration law would correct this injustice.

The Board of Medical Registration and Examination maintains an office in the Annex to the State

Capitol. This Annex was created out of the old Indiana Medical School Building. The Board maintains a clerk in this office for the convenience of those having business with the Board. She keeps the records and files the papers accruing from the daily activities of the Board. Under the direction of the Secretary of the Board, she carries on part of the correspondence, which is fairly voluminous. The Board, of necessity, must first pay the salary of the clerk, meet the expenses incident to the annual examination of candidates for license and such meetings of the Board during the year required to transact the business coming before it for decision. Much of this business has to do with the administration of the law.

During the past several years the income of the Board has been too small to permit adequate administration. The enforcement of the law rests in the office of the county prosecutor, but experience leads us to believe that action by a prosecutor waits largely on the presentation of evidence that the law has been violated. In many instances, the office of the prosecutor is not equipped for investigation into possible infractions of the law. If such investigating is done, it must arise elsewhere. It would appear that the Medical Board should serve as the interested party to discover those who are practicing medicine without proper authority as well as the numerous instances where those of limited license seek unlawfully to enlarge their fields of activity. The experience of the Board has, for many years past, demonstrated the necessity for stricter enforcement, if the profession wishes protection from those who seek to defraud the public through false claims of proficiency in the healing art.

Under the present law there is no possibility of obtaining funds needed for this purpose through general taxation. If this work is to be carried on, the money must be supplied by those whose special rights, granted by their licenses, will find protection in this activity of the Board. In other states this is done by requiring an annual registration. This annual registration is to be required, also, of all those who have licenses limiting them to a special school or cult. A nominal fee, usually two dollars, is charged for this registration. The amount so collected has been found in other states to be sufficient to permit full administration of the law. It would seem a wise procedure for the profession, through its House of Delegates, to give attention to this problem at our next annual session at South Bend.

**GOING TO SOUTH BEND,**

**OCTOBER 6, 7, AND 8?**

**SEE PAGE 349**

## VACATION TIME

Vacation time!

Who is there to say that he never has been thrilled by this word? Who is there to say that not once in his childhood did he wish that the school house might burn and give him an unexpected vacation?

"Vacation" is one of the brightest words in our language, a word that means much to most of us, and a word that leads to a planning that is second only to the carrying out of the plan. To the Izaak Walton disciple, the word brings out the fishing kit, affording many pleasurable evenings spent in cleaning and oiling the reels, rewinding the favorite rod, or adding a bit of shellac thereto; to the devotee of motor trips, vacation preparations mean delightful hours spent in tuning up the car and getting ready for the great day. No matter what the vacation plan may be, we approach it with a feeling unknown at any other time. Even in times less strenuous than those of the recent six years, this work-a-day world demands much of us. How often do we hear someone complain that the day has not enough hours, the week not enough days! Most of us are busy with our daily avocations and our hobbies; many of us have forgotten how to play, and relaxation is fast becoming a lost art with many of us.

All of the foregoing is preliminary to the advice annually given to "our folks" to get busy with your vacation plans. We might offer suggestions, but they would come from some previous experience or from the dreams of things we hope to do in the future.

An added inducement to travel is the fact that railroad rates have been drastically reduced. It is amazing how much mileage may be purchased for a few dollars. Motor travel offers unusual enticements this year. Many new roads have been opened and one can go into a section of the state with which he has been fairly familiar only to find new routes at his disposal, each offering a change of scenery to delight the eye. Recently we visited a section of southern Indiana, a section with which we have been well acquainted for forty years or more. Returning, we came upon a new highway and investigated it, with the result that road number three has been added to our list of recommendations, and thus we return to one of our favorite subjects—*See Indiana First!*

Southern Indiana each year has something new and very much worthwhile to offer the visitor. For forty years we have been visiting in that territory, and we have sent numerous parties down into that district. We repeat by saying to those who live in the foothills and the "knobs"—come to our part of Indiana—the lake region in the eastern section and the great manufacturing area in the western part of Indiana.

No one is more entitled to a vacation than the man of medicine and, having that right, no one can

enjoy a vacation more thoroughly than a physician who has been carrying on, day after day. Age does not enter into the picture, for the young and the old should get away from professional cares, forget the worries of professional life, and do those things that they have so long wanted to do. And a little thing that might well be borne in mind is the plain fact that such things as coronary disease are less likely to attach themselves to those who systematically and regularly take their vacations.

Perhaps you have guessed that this is written on the eve of a real vacation—a trip into the Canadian North Woods, so far north that we will be away from human habitations, where rest and recreation constitute about all the country affords.

Decide now to close up shop, if only for a few days. You and your patients are bound to profit thereby.

## PUBLICITY CONCERNING "SOCIAL DISEASES"

Time was, and not far in the past, when discussions of what are now known as the "social diseases"—syphilis and gonorrhea—were held only in the utmost seclusion. With bated breath the participants in these conferences approached a subject commonly taboo in polite circles. During the World War the Federal government decided to do a bit of publicity in this direction, and those who were asked to take part in the program were strongly urged to watch their steps lest the program fail through too much direct reference to syphilis and gonorrhea.

For ages medical men have known of the ravages of these diseases, not only as causative factors in our death rate, but as the causes of untold illnesses directly traceable to them. We remember that some of our professors, nearly four decades ago, taught that seventy-five per cent of "diseases of women" as they were then entitled, were directly laid at the door of gonorrhreal infections. We do not remember that there were any efforts made to reach the public with that direful information.

Gradually the picture is changing. No longer do these subjects remain without the considerations of health officials; no longer does polite society look with disfavor upon a sensible, intelligent discussion of the problem—and it is a problem of great importance and many ramifications. Creeping into our lay press, and that includes our better magazines, are numerous, well-written articles pointing out the very things that the public long ago should have been told about these diseases.

The Federal government publishes a special bulletin dealing with these subjects, entitled "Venereal Disease Information." "Health News" is a publication of the New York State Department of Health and in its issue for May 18, 1936, it carries some interesting information on this mat-

ter. It comments on the change from the "former 'hush-hush' attitude of the press and radio to a progressive policy of public enlightenment," and cites the publication of a series of articles in the New York *Daily News* which ran a series of full-page articles, freely illustrated, and written by one Carl Warren. Not only did these articles vividly portray the evil effects of these diseases, but they exposed the quacks and charlatans who are wont to prey upon the unfortunate victims of these diseases. They also "played up" the active campaign against these diseases at present being waged by the New York City Department of Health. Strangely, there was little or no criticism of the articles, and there actually was noted a very marked increase in the attendance upon the various venereal disease clinics throughout the city.

What can be done about this? We start with the premise that syphilis and gonorrhea are much more prevalent in our country than is generally imagined even by members of the medical profession. The lay public knows little of the actual situation. The first step should be a publicity campaign, a campaign with two principal objectives: (1) dissemination of information as to the prevalence and danger of these diseases, and (2) the undeniable fact that both are curable.

In a period of some fifteen years, Great Britain has reduced the number of cases of syphilis in that country by about fifty per cent. The Scandinavian populations of some fourteen million have practically abolished syphilis through the processes of compulsory reporting and treatment. We quote the New York *World-Telegram*: "518,000 persons in the United States yearly seek first treatment for incipient syphilis; 1,000,000 more for first treatment of syphilis in its advanced stages, and 1,037,000 for gonorrhea. Only one case in ten received any recognized treatment at all. (Italics ours). What has been and is being done in Great Britain and the Scandinavian countries can be done in the United States, and it is well worth the doing. The medical profession, as usual, must bear the brunt of the fight. We must enter such a campaign only after an intelligent and exhaustive survey of the field, and we must enlist every physician in active practice in the battle. One of the first steps should be an effective system of reporting all such infections. It is true that most state health departments have a rule covering this matter, but it is likewise true that the greater per cent of physicians do not make such reports. As a war measure, the Federal government did make some efforts to enforce these rules, and they even went so far as to quarantine those who were infected and who refused to take proper treatment. We of the medical profession should not falter in the matter, and once a campaign is planned, we should be the first to enlist in the cause, and that enlistment should be on an unanimous basis. Then the program of publicity must be ably directed, and

here again our profession must assume the lead, for lay folks can not properly take charge of this phase of such a program.

A program such as we have suggested undoubtedly will meet with no little opposition. We recall the time when "consumption" and cancer were diseases not to be openly discussed; we remember that when a resident of our country community was so unfortunate as to acquire tuberculosis, he was as one apart from the community and his family used every means to conceal the information from neighbors. Today people are health-minded; they have a desire to know more and more about diseases, particularly those of the avoidable and curable sort, and both gonorrhea and syphilis come under this class. We are very much in favor of press publicity of the proper sort, and by that we mean propaganda that is written by physicians of understanding.

If and when such a program is essayed in this country, it behooves us to take not only an active part, but we must be the controlling factor.

## RECLAIMING OUR WATERS

Back in the early history of our country when emigrants were setting forth from the eastern seaboard to seek new homes in the unpopulated western prairies, one of the great factors in choosing a home site was the water supply. All other things being equal, the first choice was given to those locations near a clear, undefiled stream or lake. The first of the writer's family came to Indiana 102 years ago, from what was then Virginia, and he had first choice of land in what is now a part of Carroll county. He chose to locate along Wild Cat Creek, a little stream whose beauty has never ceased to be our delight until the evil day when the straw board "works" up Kokomo way effected their insidious influence. Within a few years Wild Cat Creek was transformed from a clear, translucent bit of water to an evil-smelling cess pool, and although conditions have been improved, Wild Cat Creek today does not resemble the clean water stream we knew as a youth. The same may be said of almost any stream in Indiana. For many decades, cities and towns have been pouring their raw sewage into our natural waters; industrial wastes of all sorts and in their raw state are unceremoniously dumped into our lakes and streams. In Lake County there is a population of a quarter of a million whose untreated sewage is dumped into the Grand Calumet river, a stream that may be said to have no beginning and no ending; in other words, we have here created a cess pool of enormous proportions and have been so doing for a good many years. Residents along portions of the stream have long and loudly complained, and a few have entered suits against some of the municipalities concerned.

Stream and lake pollution has come to be one of the greatest evils within our state, and it is

with no little satisfaction that we ponder over a recent report prepared by W. H. Frazier, executive engineer of our Department of Commerce and Industries. To begin with, Mr. Frazier is convinced of the necessity of correcting this evil, and he is doing something about it. "Rome was not built in a day," we are told, and in the same sense, the waters of Indiana cannot be cleansed and purified in a day, in a month, or in a year. The important thing is that some one has had the temerity, plus the brains and the ability to study the situation and to propose a plan that promises much.

As we have said, back in the old days "straw board" pollution seemed to bring about the most concern, probably because of the foul odor this refuse created in some of our sluggish waters. Modern times and modern methods of manufacture have brought about numerous other industrial wastes, many of which are more potent as health hazards. Not the least of these is the waste from many of our canning plants as well as the numerous abattoirs that have sprung up in many parts of the state, and practically all of which have been using our streams for the disposal of their waste products. Due to the activity of Mr. Frazier and the Department, one such concern is ready to start construction of a disposal plant which will cost a tidy sum. The Indiana Canners Association is planning a test plant for the same purpose and Mr. Frazier predicts that it will "greatly accelerate the cleaning up of a major source of pollution."

However, it is noted that the Department, though it will continue to insist that water pollution must be avoided, is conscious of the fact that it would be "obviously wrong to make unreasonable demands on any commercial institution that would jeopardize its existence and thereby adversely affect the economic life of an entire community." In other words, while the Department will continue to insist that measures be taken to control injurious wastes, it does not intend to "crack down" immediately on the offenders; rather, they will be given ample time to make such changes as may be deemed advisable.

Urban sewage constitutes another problem. Most cities are financially unable to carry out plans for sewage treatment stations. At the end of 1922 there were but 28 such plants in the state; we now have 61, with none under construction. Forty such plants have been built during the depression years, probably with the aid of federal funds.

Why has this work been turned over to the Department of Commerce rather than to the Department of Conservation? Mr. Frazier advises that this was brought about by an act of the 1935 legislature, because of the legal status. The Conservation Department no longer is actively engaged in this work except in an educational way. The Division of Public Health, attached to the Depart-

ment of Commerce and Industry, would seem to be the natural channel through which such operations are carried on—hence the change.

Thus it seems that Indiana is in a fair way to see some big accomplishments in the way of stopping the pollution of our natural waters. The medical profession of the state can be, and will be of very great help in this undertaking. Mr. Frazier has asked our advice and assistance; it has been proffered and accepted; it remains for us to do all in our power to bring about this much-to-be-desired accomplishment. The waters of our state belong to the Hoosier populace who have a right to expect a rehabilitation of these waters to their former unpolluted state.

### EDITORIAL NOTES

A bit of information not generally known to Hoosier folks is the fact that the waters of the Ohio River, generally supposed to be jointly controlled by Kentucky and Indiana, are the "sole property" of Kentucky. That portion of the Ohio River which serves as a boundary between Indiana and Kentucky actually belongs wholly to Kentucky. Therefore, legally, Indians cannot fish in this section of the Ohio River without a Kentucky fishing license!

A clinician has classified most old men into two groups as to bladder or urinary function: one that has to go all the time, and one that can't go at all. A gynecologist recently classified women into two groups, the "front-back" type and the "back-front" type. A great deal of prophylactic teaching could be done by the doctor or his nurse in everyday practice by impressing upon the latter "back-front" type the importance of toilet care. Undoubtedly large numbers of women continually keep their vaginas and bladders infected because of this unconscious carelessness.

Lake county physicians are mourning the passing of one of their most ardent lay friends, William P. Gleason, known as the "father" of Gary and "father" of the Lake County Tuberculosis Sanatorium. Mr. Gleason built the present Gary steel mills and served therein as general superintendent until a year or so ago when he retired. He probably was the most active lay person in the county in matters pertaining to health and the medical profession. He gave unstintingly of his ability, his time and his money in the furthering of all such matters.

From various reports that have come to us, it seems that the district meetings this year have been of an unusually high standard and that new attendance records have been set. Occasionally we hear someone comment to the effect that district societies are really not necessary, but our observation has been that the objectors are those who seldom show any activity in their local county medical society. District societies are very important units in our organization set-up, and we dislike to hear any criticisms, particularly from those whose interest in organized medicine is almost negligible.

Governor Landon, now the Republican nominee for President, expressed himself in no uncertain terms when he addressed the Kansas City session of the American Medical Association on the subject of medical practice. He made it clear that regimentation of medicine is impractical and that he will have none of it. It will be more than interesting to see just how the Democratic nominee will approach the question—and approach it he must since the support of 160,000 medical men would be quite a political asset in view of the fact that some of the department heads of the present administration seem to be making friendly overtures to the proponents of socialized medicine.

A recent bulletin from the U. S. Department of Agriculture upsets an impression commonly held concerning pork products. Most of us have been of the opinion that "inspected" pork products were trichina free, but this is not so, according to the report. "The assumption that pork which has passed inspection is safe, even when eaten raw or undercooked, is erroneous. There is no test that will show definitely whether trichinæ are present in a sample of pork except in some cases of severe infestation." The report also states that trichinosis is quite prevalent and that numerous deaths are caused by the disease. The warning is again sounded that raw or undercooked pork products should not be used.

A recent publicity release by the Julius Rosenwald Fund indicates that this organization means to continue its activities in behalf of socialized medicine at a time when several other philanthropic groups have backed away from such plans

and have entered other fields. The announcement is made that at the present time some 350,000 persons are listed under the voluntary-insurance-group-hospitalization plan in operation by the Fund. It is also announced that steps are being taken to include medical care as well as hospitalization in their insurance plans. This is but another instance of the necessity for the medical profession to carry on the fight that has been so strenuously waged for some years past.

The termination of a suit filed against the New York Better Business Bureau (together with some ninety-five other defendants) in which the rather tidy sum of \$30,000,000 was asked as actual and punitive damages, and in which the United States District Court jury found for the defendant, reminds us of some of the numerous suits filed against the American Medical Association during past years. This thing called "the law" is a funny business. Just why respectable organizations should have to put up with what amounts

to no more than "nuisance suits" is beyond our ken. We have forgotten the actual amount of damages asked of the A. M. A. in such suits, but the total is quite beyond the ability of the average doctor to comprehend.

The recent Republican convention at Cleveland stressed the ever-growing importance of the radio. Practically every spoken word was sent over the ether waves, and many of the larger stations gave full time to the programs. One of the newer features was that of having a microphone at the disposal of each of the state delegations, thus permitting the listeners to hear the various votes as they were announced. This radio thing has come to be a pretty big affair, and some of the confirmed "addicts" were able to name various speakers as they came on the air unannounced. During the election of the nominee for vice-president, a friend of ours was able to identify the voices of all the notables who took part in that program!

As we go to press, we learn of the death of Dr. J. Tate Mason, of Seattle, Washington, president of the American Medical Association. Dr. Mason died June twentieth.

**South Bend is making great preparations for the state convention the first week in October. There is every indication that there will be a record attendance this year. In line with improved business conditions everywhere, South Bend is enjoying prosperous times. Because of these facts members are urged to make reservations early for the hotel accommodations for themselves and guests. Those sending in their reservations now will be assured of the choicest rooms at the rate they desire to pay. The membership of St. Joseph County is anxious to see that you have a comfortable and enjoyable visit with them this fall and are therefore urging everyone to make reservations now. See Page 349.**

Just a little suggestion to county medical society secretaries: be a bit chary of the chap who has been practicing for a number of years without showing any interest in medical organizations and then suddenly takes a notion that he wants to join. Recently we had a letter from one of this type; he had graduated in 1923 and never had been identified with a medical society although he lived in large cities throughout his professional life. It developed that the chap had learned that membership in his county medical society was a requisite to an appointment which he desired. We refuse to be very much interested in such applications, and it remains to be seen how he will fare at the hands of our members. The holding up of such applications for a few months or a year is to be highly recommended.

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Dr. Clarence A. Cheny, retiring president of the American Psychiatric Association, in his address before a recent meeting of that body, commented on politics as it affects some of our institutions for the treatment of mental diseases. He declared that in an experience of twenty-five years as the head of a mental hospital, he had never encountered politics insofar as it related to appointments in his institution. He then went on to say that this experience was quite unusual, in that politics sooner or later shows its hand (we almost said ugly head) and the superintendent is thereby "put on the spot." In our own state we have not been free from this evil, since it is quite apparent that numerous appointments have been made solely from a political standpoint. The medical profession of Indiana can render a distinct service to the state by demanding that all state hospital appointments be made on the basis of merit only.

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The United States Department of Agriculture, which handles matters pertaining to violations of the Food and Drugs Act, apparently means business, if we may judge from the manner in which they fine various violators. Every little while we receive a bulletin concerning these activities, enumerating a dozen or more such convictions. Fines are assessed in various sums ranging from fifty dollars to several hundred dollars. In a bulletin issued May fifteenth, we note a matter that interests us: an Ohio concern was fined \$400 on account of short-weight preserves, while a salmon packer in Oregon was fined \$100 on account of decomposed canned salmon! However, the Bureau is doing mighty good work, and we should perhaps be a bit lenient in our criticisms as to distribution of fines. One concern recently was "put through the jumps" for trying to sell to hospitals and similar institutions a disinfectant which was found to have little or no value as an anti-septic.

Some advertising agencies have established what they call "news service" departments, and from time to time those departments send out bulletins regarding new or improved instruments in the hope that magazines such as ours will comment upon the instrument. They do not offer to purchase any space for paid advertising, but they would like "a copy of the magazine containing your comments" so that they may know just how much free advertising was given. Perhaps some editors will make the desired comments with the idea of obtaining advertising in the future, but we hope not. This particular nuisance constitutes one of our pet peeves. Long ago we discovered that those agencies and companies who have something worthwhile to advertise are perfectly willing to pay for their advertising space, and make no effort to wheedle space from editors under the guise that the items submitted are distinctly "news" and not advertising. The advertisers in this magazine pay for the space they use, and they deserve your patronage.

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The De-Duct Fraternity is enrolling an increasing membership. Regardless of the fee charged, whether standard or substandard, an increasing number who come to our offices ask and often expect reductions "in line with present conditions." Averaging these with part-pay cases and with the charity load leads to but one conclusion: the doctors of this state, by and large, have been working harder and harder for less and less for the past several years. Now, add all this to the pressure being put upon us and our hospitals by welfare groups, by insurance practice competition, by free and part-pay clinics, and by the over-hanging, ready-to-fall threat of socialization and regimentation; the sum total surely indicates a lesser service to our patients. In the long run, they get what they pay for; it is worth only as much as it costs. If this is true of shoes and clothing, of automobiles and transportation, of housing and its what-nots, then, too, must it be true eventually in medical practice. The solution? You name it! In some states, those who are condemned to die are given a choice in the manner of exit. Organized Medicine, with every practicing physician having a voice and with the entire group having one composite opinion, should have the say-so in the future medical practice.

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IF YOU HAVE NOT MADE YOUR  
HOTEL RESERVATIONS FOR THE  
SOUTH BEND SESSION, DO SO  
NOW. SEE PAGE 349.

Silicosis, a disease that in recent years has come to be a factor to be reckoned with by industry, has recently commanded the attention of federal officials. Frances Perkins, Secretary of Labor, recently issued a statement concerning a campaign to lessen its ravages. She states that more than a half million workers in our mines, quarries, foundries, glass works and other industries are exposed to this hazard. Since the cure of silicosis is not known, her contention is that preventive measures should be the goal, citing the fact that certain industrial concerns already have been successful in eliminating the disease in their plants. Silicosis comes from the breathing of certain dust-laden airs, causing deposits in the lungs; prevention, then, lies in the prevention of dust, or in the control of dust in our industries. Among the things recommended are "wetting down," keeping rooms and walls clean, and the use of certain types of machinery. Pressure masks may be necessary in some cases but are not comfortable when worn for a period of several hours. Short exposure to this dust is believed not to be harmful, except in those instances in which the dust is concentrated. Secretary Perkins has appointed several committees to study the problem; a casual survey of the members of the three major committees indicates that she has done a very good job in the selection of the men to make this study.

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The Indiana medical profession has reason to be more than pleased with the support it has had from the present Attorney General, and in particular that accorded the Indiana State Board of Medical Registration and Examination. Recently a matter came to the attention of the Board, involving a very unpleasant situation in one of our communities. The Board asked the assistance of the Attorney General in the matter. That a thorough investigation was made is evidenced by the following letter (names and locations omitted) received from that official:

Dear Doctors:

After having discussed matters here in the office with the \_\_\_\_\_ doctors and having gone to \_\_\_\_\_ and talked to \_\_\_\_\_, and also after having had a full discussion of the status with the Honorable \_\_\_\_\_, Prosecuting Attorney, I find the following situation:

At least two doctors are grossly violating the medical practice act. One institution is so flagrantly out of line that steps should be taken immediately to regulate the same. Also, reports are prevalent that more than one physician of your county has not only forgotten the ethics of his profession, but is disregarding the law and as a result, the profession is falling from the high plane upon which it should stand.

The writer was very much gratified in his conference with your prosecutor. He undoubtedly stands ready and willing, and anxious, to prosecute violations of the medical practice act or to take any steps that are proper to curb the drift of the profession. You will all understand that in order to do this, the prosecutor is helpless unless he has the full cooperation of law abiding citizens, as it is necessary for him to obtain concrete evidence on which to base his court action. It will be necessary, therefore, that you see to it that evidence such as he requires is furnished him. The nature of the same will be revealed to you upon your visit with the prosecutor. If possible, contact your prosecutor at once for the purpose of having him outline to you just what he wants in the nature of the evidence. As soon as you present, or have presented to him the evidence in conformity with his suggestion, steps will be taken for court action.

This department stands back of your prosecuting attorney ready to aid in further steps pertaining to the curbing of illegal practice. The nature of this action may be either civil or criminal. The writer advises injunctive relief, which is of a civil nature and takes questions of law and fact away from the jury and places them before the Judge. I understand that your Judge is a man of the highest integrity and will decide questions presented before him absolutely on the law and evidence and that he will not be guided or influenced by outside influence.

I understand that there seems to be some dissension in your profession which naturally might cause some practitioner to fear the consequences of an action such as is contemplated. Let me assure you, gentlemen, that the consequences of the steps that are recommended could not in any manner interfere with your professional standing. Rather, you would be censured in permitting illegal practices to exist where it is within your power to aid in curbing it.

Copies of this letter are being sent to your prosecutor and one for the files of the State Medical Board. I sincerely trust that you will, at once, gather round you your highest grade medical men and other persons interested and visit the prosecutor at a time convenient to all in order that you may outline the proper steps to be taken for the securing of evidence which is so necessary at the present moment to base any action, either civil or criminal. Be assured that we stand ready to cooperate with your prosecutor and to proceed without delay when you have secured the necessary evidence for the prosecutor.

Very truly yours,

JAMES D. STURGIS,  
Deputy Attorney General.

**INDIANA STATE MEDICAL ASSOCIATION  
87TH ANNUAL CONVENTION—OCTOBER 6, 7, 8, AT SOUTH BEND**

**FOR THE LADIES!**

Women who attend the convention at South Bend, October 6, 7, and 8, will be kept so busy that they will have no time to wonder how their husbands are getting along at the medical meetings. The Woman's Auxiliary to the St. Joseph County Medical Society has planned a program which will occupy their whole time.

The entertainment for the women will include a sightseeing tour in Studebaker busses from ten until twelve o'clock on Tuesday, October sixth. A tea at St. Mary's College has been arranged for Tuesday afternoon, and this will be a rare treat, for Sister Madeleva, president of the college and a noted poet, will present the principal part of the program. Sister Madeleva ranks with the best of our contemporary poets and is the author of four volumes of poetry. St. Mary's College is a beautiful place, and draws visitors from all parts of the country.

A dinner and bridge at the Oliver Hotel in the evening will complete the women's activities on Tuesday.

The Chain o' Lakes Country Club will serve breakfast to the visiting women Wednesday morning, and Studebaker busses will furnish transportation to the club. A garden tour has been arranged for the afternoon, and guests who prefer entertainment of another sort will be invited to be guests of the Alliance Francaise where Mrs. Charles Dewey and Madame Laure will entertain them. A display of the works of modern painters usually is on view in the club rooms.

The Notre Dame galleries will be open to those who are interested in a fine collection of religious paintings, priceless icons, and other collections of art. The Vincent Bendix collection of Gobelin tapestries hangs in the Notre Dame galleries, and most of the tapestries are so old that they have been preserved with great difficulty. However, they are exceedingly beautiful and valuable, and are considered to be some of the finest in existence, so those who are interested in such things will not want to miss this exhibit.

No trip to South Bend is complete without a visit to Notre Dame, and the women will join the men for the banquet meeting at Notre Dame at seven o'clock Wednesday evening.

In charge of arrangements for the auxiliary are Mrs. K. T. Knode and Mrs. Alfred Giordano. Mrs. James Wilson is chairman of the entertainment, and other committee chairmen are: Mrs. Alfred Ellison, registration; Mrs. P. G. Skillern, golf; Mrs. David Bickel, sightseeing; Mrs. F. P. Eastman, hostess; Mrs. J. A. Abel, transportation; Mrs. F. R. N. Carter, flowers; Mrs. Harry Helmen, breakfast; Mrs. J. E. McMeel, finance; Mrs. P. J. Birmingham, publicity. Mrs. Harry Cooper is president of the St. Joseph County auxiliary.

**HOTELS IN SOUTH BEND**

The hotels listed below will have rooms available during the convention. A coupon is printed at the bottom of this page, for your use in requesting reservation. All reservations will be made through the hotel committee this year; first requests will have best choice of rooms at the rates requested. Send your reservation NOW.

Hotel Oliver: Single, \$2.50; double, \$4.00; twin beds, \$4.50 (and up). Detached bath, single, \$2.00; double, \$3.50.

Hotel Hoffman: Single, \$2.50 to \$3.50; double, \$4.00 to \$5.50; twin beds, \$4.50 to \$7.00.

Hotel LaSalle: Single, \$2.00 to \$3.00; double, \$3.50 to \$5.00. Detached bath: single, \$1.50; double, \$2.50.

Hotel Jefferson: Single, \$2.25 to \$2.75; double, \$3.00 to \$3.50; twin beds, \$4.00 to \$5.00. Detached bath: Single, \$1.50 to \$2.00; double, \$2.00 to \$3.00; twin beds, \$3.00 to \$3.50.

Hotel Morningside: Single, \$2.00; double, \$3.00. Detached bath: Single, \$1.50; double, \$2.00.

Hotel Robertson: Single, \$2.00; double, \$2.50. Detached bath: Single, \$1.50; double, \$2.00.

LaSalle Annex: Single, \$1.75; double, \$2.50.

Mishawaka Hotel (in Mishawaka): Single, \$2.00 to \$2.50; double, \$3.50. Detached bath: Single, \$1.50; double, \$2.00.

Four Flags Hotel (in Niles, Mich.): Single, \$2.50; double, \$3.50.

**Reservations should be sent to:**

**Alfred Ellison, M.D.,  
826 Sherland Building,  
South Bend, Indiana.**

**Please reserve hotel accommodations for the time of the convention of the Indiana State Medical Association in South Bend, October 6, 7, and 8. I expect to arrive \_\_\_\_\_.**

**Name** \_\_\_\_\_

**Address** \_\_\_\_\_

**Prefer hotel** \_\_\_\_\_

**Room requirements** \_\_\_\_\_

(Single, Double, Twin Beds)

**Rate** \_\_\_\_\_

## PRESIDENT'S PAGE

### MOST PHYSICIANS ARE ETHICAL

A public official, a layman, in discussing matters of medical economics, recently held that the plan of medical organization is weak in that the standards of ethics in county societies vary with the level required by the membership of each local unit. This, he added, can not readily be corrected as long as local members are indifferent to or approve of unethical practices. Evidence was submitted to explain his point. He suggested that if medical organization can not or will not correct this defect and apply its efforts to the maintenance of desirable standards, it might better place itself under the supervision of the Better Business Bureau, Chamber of Commerce, or other similar groups.

Excessive charges by some physicians for medical services rendered to those of meagre income is the most troublesome and inexcusable example of unfair economic practice. It is to be admitted that patients are frequently at fault in not making their financial conditions known at the time services are received, and the average fee may be obviously excessive to a patient of very limited finances. Some physicians have endeavored to justify excessive fees against those of very low income on the basis of charity service rendered others. It is plain that this position is not tenable. Moreover, investigation generally reveals that charity does not flow in any greater proportion from the hands of those who most often use this excuse for unjustifiable overcharge. The use of unfair collection methods for the exaction of fees known to be excessive must be recognized as a "racket." Thoughtless physicians seem to assume that transactions between the physician and his patient are governed only by *laissez faire*; whereas, on the contrary, the physician, in the system of graduated fees, accepts responsibility to the profession, to give fair treatment to the individual who is admittedly unable to judge his needs for service or fix the compensation therefor.

That which automatically and without conscious consideration makes the individual ethical and fair, lives in the fibre of that individual and no matter whether viewed from a moral, intellectual, or spiritual approach is to some degree an unteachable quality. The interests of the whole group, and of the public, as well as those of the individual, make it necessary that certain ethical standards be set up, rules of behavior defined, and certain stringencies of group requirements imposed. These can be taught, and should assist the individual to that form of self-discovery by which he may see himself in his relation to fellow-members of his profession and the public which he serves.

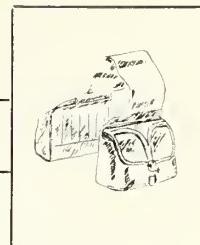
The economic implications in the "Principles of Medical Ethics" are definite as pointed out in a study of "Economics and the Ethics of Medicine" by the Bureau of Medical Economics.

The conduct of the individual in the economics of medicine is not a purely personal matter in which he alone has the right to be interested. The attitude of county medical societies toward unethical conduct and unfair economic practice is a matter of interest to other component societies, to the State Association, and to the American Medical Association. The responsibility of each is clear. In the politico-social organization of government, the effects of the acts of individuals or small groups frequently unfavorably affect national attitudes. Legislators are elected by and responsible to the public. Complaints from the electors, to a legislator, that the medical service of his territory is characterized by unfair or unsatisfactory practices may have a profound effect and suggest that governmental control of the distribution of medical service may be necessary. Many of these complaints do not reflect the real facts, but unhappily some appear to be true. Some are due to acts of individuals who are not members of medical societies.

The House of Delegates of the American Medical Association, in May of 1936, adopted an amendment to the By-Laws of the Association which extends the power of the Judicial Council in matters of fellowship and medical ethics so that it "shall have authority in its discretion from time to time to request the President to appoint investigating juries to which it may refer complaints or evidence of unethical conduct which in its judgment are of greater than local concern. Such investigating juries, if probable cause for action be shown, shall report with formal charges to the president who shall appoint a prosecutor who, in the name and on behalf of the American Medical Association, shall prosecute the charges against the accused before the Judicial Council. The Council shall have the power to acquit, admonish, suspend or expel the accused." The language and purpose of the action is clear. Organized medicine can fix ethical standards and insist upon their observance by all its members.

Most physicians are guided by high ethical principles. To one who is responsive to the best traditions of medicine and to the nobility of character and sincerity of purpose which have created its ideals, the reflection of unethical conduct upon the profession is humiliating and intolerably offensive.

*R. L. Dennerick*



## Indiana Medicine in Retrospect

L. C. ZERFAS, M.D.  
Historian, Indiana State Medical Association

### ORGANIZERS OF FIRST DISTRICT MEDICAL SOCIETY

The first medical law in Indiana appointed five censors to meet at Vincennes on June 2, 1817, to organize the First District Medical Society. Four of these men met and the minutes of that meeting are still preserved. Who were these men and what were their qualifications? It has been impossible to prove that any of them attended a medical school, but they must have been well trained, because at their second meeting, they amended the constitution to read that "no person shall be admitted to an examination before the Medical Censors without producing satisfactory evidence of having studied Physic and Surgery for the full term of three years." This did not mean in a school as some of the best trained men then obtained their education with preceptors. A brief history of the lives of these five important doctors will be given.

1814, he took Dr. William Carr Lane as a partner. Two years later he was elected a trustee of the Borough of Vincennes and was a candidate to represent Indiana in the United States Senate. He was president of the First Medical District in 1817 and in 1827. In 1819 he opened an apothecary shop with Dr. Robert Alison and they advertised that "they have just received a fresh supply of drugs from Philadelphia and trust their long experience with diseases incident to this country will enable them to put up for family use the most appropriate medicines accompanied with the necessary plain and safe directions." This same year he was on a committee with Drs. Lawrence S. Shuler, Hiram Decker, Philip Barton and William Chauncey Whittlesey to choose a delegate to meet in convention for the purpose of forming a district pharmacopœia and to decide on the proposals of Dr. J. Smith, United States agent for vaccination, for establishing a National Vaccine Institution.

Dr. McNamee was a candidate for presidential elector for Andrew Jackson in 1822, and was elected to the board of the Vincennes Library and of Vincennes University. In May, 1825, he moved to New Harmony and stated that he "will receive payments for accounts in wheat, corn, pork, tow and flax linen, ginseng, beeswax or lumber." In May, 1827, he was again in Vincennes and opened a medicine store with Dr. J. D. Woolverton, his son-in-law.

Dr. McNamee was appointed on the Board of Health organized in 1832 to protect the citizens of Vincennes against cholera and in June, 1833, he published a lengthy article on the cholera, its symptoms and cures. There were no cases of cholera reported in Vincennes during that epidemic. In November, 1833, Dr. Joseph Maddox took over his drug store.

Perhaps Dr. McNamee's most important contribution to the medical profession in Indiana was a case tried in Sullivan County, Indiana, November, 1833, on whether a physician could obtain action for his fees. It was contended by English common law that a physician could not sue for his fees, and, as there was no statute on the subject, the common law was in force in Indiana. Judge Stephen C. Stevens stated, "Our institutions and laws are all based on the great and broad principles of liberty and equality, . . . and a physician can maintain



Dr. Elias McNamee

(Secured through the courtesy of the Francis Vigo Chapter of the Daughters of the American Revolution)

Dr. Elias McNamee came to Vincennes in 1808 from Pennsylvania. He was a political supporter of Governor Jennings and at the time of the election for territorial delegate, he edited the *Indiana Centinel* and wrote a number of articles against Thomas Randolph, Jennings' opponent. As a result Randolph challenged him to a duel, but being a Quaker, McNamee refused to fight. In March,

an action for his fees in America. It was so settled, after solemn argument in the Supreme Judicial Court of Massachusetts as early as the year 1789." Dr. McNamee died August 22, 1834, in Vincennes.

*Dr. Joseph Kuykendall*

Dr. Joseph Kuykendall was born October 31, 1770, in Hampshire County, Virginia, the son of Nathaniel Kuykendall. In 1799, after completing his medical studies and sharing for some time in the successful practice of his tutor, the enticements of the "far west" induced him to emigrate to the well-known settlement of Vincennes. He married Catherine Decker, April 2, 1799, and the young couple went west during that summer. For thirty-four years Dr. Kuykendall lived in Vincennes, practicing his profession, enjoying the confidence of all the people and adding to the comfort and happiness of all around him. He was recommended in 1805 by William Henry Harrison to President Jefferson for the legislative council, but was not accepted. He served as Coroner from 1809-1810 and December 17, 1811, he sent in a report of the sick and wounded at Fort Knox, as Assistant Surgeon's Mate. Dr. Kuykendall was very active in the formation of the First District Medical Society, chairman of the first meeting, censor for several years, treasurer in 1827, and vice-president in 1832. He took an active part in the civic affairs in Vincennes, but never held a state office. He was a trustee of the Borough in 1818 and in 1824, of Vincennes University, of the Vincennes Library, was treasurer of the Bible Society of Knox County, and chairman at a meeting to decide upon erecting a Presbyterian church in Vincennes. Dr. Hiram Decker became a student of Dr. Kuykendall and on September 14, 1819, married his daughter, Eliza, after which the two doctors became partners and practiced together until Dr. Kuykendall's death, September 5, 1833.

*Dr. Thomas Polk*

Dr. Thomas Polk was born February 21, 1792, in Nelson County, Kentucky, the son of Capt. Charles and Delilah (Tyler) Polk. He was the first physician at Princeton, Indiana, in 1814. Dr. Polk was present at the first meeting of the First District censors and was appointed secretary pro tem. He was present at the meetings in 1818 and 1819. He married Sarah Sloan, of Princeton, and in 1820, he, with his wife and several small children, emigrated to Arkansas territory where they stayed about a year. Lured by adventure and prospective land grants, they moved to Texas and were members of Col. Stephen Austin's colony. Dr. Polk practiced medicine and engaged in farming and ranching until the war with Mexico when he was a surgeon in the army of the republic. He had the cholera after the battle of San Jacinto, but recovered and moved to Gonzales County where

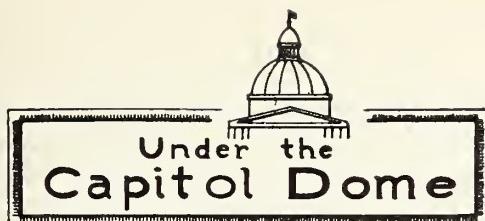
he engaged in farming until his death, February 7, 1872.

*Dr. David M. Hale*

Dr. David Morey Hale was born in Pittsfield, Massachusetts, and after serving in the War of 1812, settled in Vincennes. He entered into partnership with Jeremiah Wood in 1816 under the firm of "Hale and Wood" in the apothecary business. They advertised "an infallible remedy for fever and ague and intermittent fever, a single box never failed to cure in three days and it is safely taken in pills or mixed with any drink." Dr. Hale was present at the first meeting of the First Medical District and was elected treasurer. In May, 1818, he presented a letter from Dr. Lyman Spalding, of New York, on the subject of forming a national pharmacopoeia. October 22, 1816, Dr. Hale married Esther Scribner, from New Albany, and in December, 1817, the partnership of Hale and Wood was dissolved and Dr. Hale moved to New Albany and became the proprietor of the famous Hale Tavern. Dr. Hale was described as an elegant gentleman of the old school, wearing ruffles in his shirt front and bearing himself with the dignity and courteous deportment of the ruffled shirt front period. The rates at the tavern were given as "breakfast 51½ cents, dinner 37½ cents, supper 25 cents, peach or apple brandy and gin 18¾ cents per ½ pint, whiskey 12½ cents per ½ pint, wine per pint 87½ cents, lodging per night 12½ cents, corn or oats per gallon 12½ cents, stabling and hay for one horse per night 37½ cents." Dr. Hale died December 5, 1842.

*Dr. Joel F. Casey*

Dr. Joel Fraser Casey, the son of William and Elizabeth Fraser Casey, was born in Harrison County, Kentucky. Dr. Casey was listed as a member of Mr. Chandler's dancing class at Princeton, in 1816. He was not present at the First District medical meeting in Vincennes, nor was he listed as a member of the Society either in 1817 or 1819. In 1818 an election was held to decide whether the new town of Princeton should be incorporated and Joel Casey was clerk of this election. From August, 1820, to November, 1821, he was agent for the county and entered into bond in the sum of \$2,000 for the faithful performance of his duties. August 14, 1823, he married Sarah Harrington, daughter of William Harrington, former county treasurer. Dr. Casey died in March, 1828, and a great deal can be learned from his inventory about his training. He had the usual drugs of that period: "quasia, cream of tartar, ipuacquauna, jallap, gum arabic, aloes, tartar emetic, spirits of ammonia, ether, nitrick ether, quick silver and a half pound of calomel." He was credited with having nineteen medical books besides four volumes of Bells, Cheseldon, Hamilton and Cullen, a dictionary, Duncan's Dispensatory, and six medical journals.



The state board of medical registration and examination conducted a clinical examination May twentieth at the Indiana University Medical Center for Illinois applicants for reciprocal licenses to practice in Indiana. Those taking the examination were Dr. Heinrich Kobrak, Dr. B. C. Baron, Dr. Harry V. Scott, and Dr. Charles K. Neher.

The state board of medical registration and examination will conduct its regular semi-annual meeting Tuesday, July 14, in the board's offices in the Statehouse annex.

Township trustees, as overseers of the poor, are not absolutely required to pay the water bills of indigent families as an arbitrary duty, according to an opinion written by Philip Lutz, Jr., attorney general, for Dr. Verne K. Harvey, director of the state division of public health. However, the opinion said that: In a sense, it is a mandatory duty of a township trustee, as an overseer of the poor, to provide necessities for indigent persons, but of course each case must be considered on its merits, and the trustee must be allowed a reasonable discretion in his decisions. I can conceive of cases where the surroundings of an indigent family might be such that it would be inexcusable neglect for the trustee, as overseer of the poor, to refuse payment of a water bill. This would depend upon the housing, the sanitary arrangements, the number in the family, and other conditions in the case. That part of the statute which allows the water bills, under certain conditions, to be charged to the public health account, is an acknowledgment of the fact that there are cases where the use of water from a public water system is necessary, not only for the health of the indigent family, but for the community where the family resides."

In concluding his opinion, the attorney general said: "It is my opinion, therefore, that while a trustee may not arbitrarily decline to pay or assume a bill for water service which the statute authorizes him to pay, the duty is not a mandatory one."

A preponderance of inmates of the Indiana State Prison, present in the institution at the close of the last fiscal year, were rated as being in good

physical and mental condition, according to a census report prepared by the prison trustees.

Of 2,417 prisoners, a total of 2,091 were rated as being in good physical condition, 231 as "fair," and 95 as "poor." Mentally, 1,886 were rated as "good," 69 were given a "fair" rating, 39 were classed as feeble minded, 191 were classed as "dull," and 232 as insane.

Only 22 prisoners were known addicts of narcotics. Of these, 2 were serving sentences for homicide, 8 for robbery, 3 for burglary, 1 for forgery, 5 for larceny, and 3 for other crimes. None of the narcotic users were under sentence for rape or other sex crimes.

A total of 181 of the prisoners were known to have had syphilis, and 708 were known to have had gonorrhea, while 1,528 were recorded as not having either disease. Crimes for which the known cases of gonorrhea were serving sentences were: homicide, 124; rape, 40; robbery, 224; assault, 21; burglary, 137; forgery, 18; larceny, 94; sex crimes other than rape, 10; violating liquor laws, 2; other crimes, 38. Crimes for which the known cases of syphilis were serving sentences were: homicide, 41; rape, 15; robbery, 58; assault, 3; burglary, 31; forgery, 3; larceny, 20; other crimes, 10.

The report showed that 2,251 had no physical disabilities; 153 were partially disabled, and 13 were totally disabled.

A total of 999 prisoners did not use alcohol while 1,418 did drink. All but 222 used tobacco in some form; 1,305 chewed; 1,951 smoked; 1,593 used cigarettes.

#### DIRECTOR OF CRIPPLED CHILDREN'S SERVICES

The appointment of Dr. Oliver W. Greer, 1304 North Alabama Street, Indianapolis, as director of crippled children's services in the new state department of public welfare has just been announced by Wayne Coy, acting administrator of the department. Dr. Greer will take over his new duties on July 1. He will devote his whole time to the work.

Dr. Greer is a graduate of the Indiana University School of Medicine, having received his degree in 1923. After a sixteen months' internship in the Indianapolis City Hospital, Dr. Greer entered the practice of medicine in Indianapolis. Since 1924 he has been in the service of the city board of health as a member of the nutrition staff, where his duties included the examination of under-weight children and conducting classes for children and mothers in the various schools of the city. Dr. Greer also has conducted health classes at Arsenal Technical and Washington high schools in Indianapolis and has spoken before many parent groups on the subject of nutrition and child health.

Dr. Greer is a member of the staffs of the Indianapolis City Hospital, the Coleman Hospital and the Methodist Hospital. He is a member of the Indiana State Medical Association and the Marion County Medical Society.

## DIPHTHERIA DEATHS IN MAY, 1936

Four deaths from diphtheria for the month of May is an average number for that month. However, this brings the total figures for 1936 to 61 which is higher than for any of the last three years.

Kokomo, Lafayette, and South Bend—all good-sized cities—reported three of the deaths, which were of children between the ages of three and eight. The other death, in Benton County, was that of an adult.

The greatest toll of diphtheria falls in the months from September through March. It is distinctly worth while, therefore, to make a strong plea for the immunization of the children before school starts in order to reduce the usual rising curve for the fall and winter months.

The distribution of the deaths by counties for the month of May and for the period of the year is given in the table below:

County	No. for Month May, 1936	No. for Year 1936
Allen	0	2
Benton	1	1
Brown	0	3
Cass	0	1
Clark	0	1
Delaware	0	1
Dubois	0	1
Elkhart	0	2
Grant	0	1
Greene	0	2
Howard	1	3
Jennings	0	1
Knox	0	1
Lake	0	3
Lawrence	0	2
Madison	0	4
Marion	0	9
Martin	0	1
Monroe	0	1
Montgomery	0	3
Owen	0	1
Parke	0	2
Pike	0	1
Ripley	0	1
Saint Joseph	1	3
Tippecanoe	1	4
Vanderburgh	0	3
Vigo	0	1
Warren	0	1
Washington	0	1
Totals	4	61

DIPHTHERIA PREVENTION COMMITTEE,  
Thurman B. Rice, M.D., Chairman.

## SECRETARIES' COLUMN

Remember that the Indiana State Medical Association will meet in South Bend in October. The program for this meeting will be very interesting and instructive. Plan now to attend.

How many of your members will be without THE JOURNAL of the Indiana State Medical Association this month?

All candidates for offices—national, state, and local—have been nominated. Look them over carefully. Prepare your ballots in November carefully.

The newspapers indicate that Epstein, Kingsbury, LaGuardia and others are keeping their side of the question of social medicine before the public. It is up to the doctors to keep their side of the question before the public. Social medicine may be asleep, but it is not dead. It will take only a few drops of political night-mare to awaken it. Beware of political greed. Mark your ballot with care.

Have you had a meeting this year on traffic accidents, as suggested by the Committee on Traffic Accidents of the Indiana State Medical Association?

What do you think of the idea expressed in the following article taken from the June fourth issue of the New York Times:

One way to get better medical care for the public would be to put young doctors on a sort of probation period before they are given permanent licenses to practice medicine.

Such a scheme of "trial" licenses for young doctors, to be made permanent when the young medicos have proved themselves, is suggested by Dr. Irvin D. Metzger, of Pittsburgh, president of the Federation of State Medical Boards of the United States.

"Exploiters could be eliminated before they became socially grounded," Dr. Metzger pointed out in explanation of the plan. "Quasi-ethical nuisances could be curbed before they brought reproach on the entire profession. Amateur specialists could be halted before they demoralized the faith of the community in the integrity of the profession. Bunglers in practice, because of irresponsibility or lack of adaptability, would be offered an opportunity to seek a more suitable vocation. All would be urged by this subsequent check-up to do their best in improving their ability to serve their community and their state."

One of the reasons social workers and politicians call for medical regulation by the state, Dr. Metzger asserted, is that too many recent physicians have too much of the business-like attitude.

A means of discovering the deeper factors of personality desirable in a physician will have to be found before long by administrators of medical laws, he said. One step in this direction would be the "trial" license granted for about five years, after which a renewal for permanency would be required.

## DEATHS

WALTER H. MYTINGER, M.D., tuberculosis specialist of Lafayette, died June thirteenth, aged fifty-one years. Dr. Mytinger had been superintendent of the William Ross Tuberculosis Sanatorium at Lafayette since its opening, six years ago. He served in the medical corps during the World War, and was medical officer for the Veterans Bureau in Indianapolis following the war period. He graduated from the Physio-Medical College of Cincinnati, Ohio, in 1912, and was a member of the Tippecanoe County Medical Society, the Indiana State Medical Association and a Fellow of the American Medical Association.

BRYANT F. HORNER, M.D., of Campbellsburg, died June sixth in a hospital in London, Kentucky, following an automobile accident. Dr. Horner had practiced in Campbellsburg since 1924, and had served as coroner of Washington county. He was a member of the Washington County Medical Society, the Indiana State Medical Association and the American Medical Association.

CHARLES L. LANDFAIR, Bluffton, died June eleventh, aged eighty years.

MARIETTA HASLEP, M.D., Indianapolis, died June second, aged seventy years. Dr. Haslep had served as president of the Indianapolis Board of School Commissioners, and had acted as physician to inmates of the county jail, county workhouse, and county farm. She was examining physician in the public schools in 1914, and was a medical missionary in China from 1888 to 1895. Dr. Haslep graduated from the University of Michigan Medical School, Ann Arbor, in 1883.

PETER MAGENHEIMER, M.D., of Chandler, died May twenty-eighth, aged eighty-five years. Dr. Magenheimer was the oldest practicing physician in Warrick county. He was a graduate of the Medical College of Indiana, Indianapolis, in 1880.

JOSEPH T. JOHNSON, M.D., Negro physician of Indianapolis, died May twenty-fourth, aged forty-four years. Dr. Johnson graduated from the Meharry Medical College, Nashville, in 1913.

GEORGE E. CLEMENTS, M.D., of Crawfordsville, died June seventeenth. Dr. Clements had practiced in Crawfordsville more than thirty years. He graduated from Rush Medical College, Chicago, in 1900, and studied in Berlin and Vienna. Dr. Clements served with the medical corps of the Canadian army during the World War. He was a member of the Montgomery County Medical Society, the Indiana State Medical Association and the American Medical Association.

## HOOSIER NOTES

Dr. and Mrs. W. L. Pugh have moved from Milroy to Indianapolis.

Miss Sarah Ellen Gilworth, of Warsaw, and Dr. Frederic Perry, of Plymouth, were married June sixth.

Miss Essie Katherine Rairden, of Lyons, and Dr. Harold B. Turner, of Bloomfield, were married May twenty-eighth.

The Indiana State Dental Association held its annual convention May 18, 19, and 20 in Indianapolis.

Dr. L. A. Ensminger has been reappointed as a member of the Indianapolis Board of Public Health for a four-year term.

Miss Mary Dailey, of South Bend, and Dr. B. A. Kamm, of South Bend, were married May twenty-fifth.

Miss Martha Elizabeth Piel, of Indianapolis, and Dr. George L. Jones, of Wanamaker, were married June twentieth at Wanamaker.

Dr. David E. Engle, of Martinsville, and Miss Faith Ritz, of Royal Center, were married, June eighth.

Dr. Don Miller, of Twelve Mile, was injured in an automobile accident, June eleventh. He suffered a fracture of the right arm.

Fire destroyed the roof and second floor of the home of Dr. Charles P. Emerson, in Indianapolis, May thirtieth, with a loss of several thousand dollars.

Dr. William Sennett, of Monterey, has moved to Macy where he will practice. Macy has been without a physician since the death of Dr. P. B. Carter last November.

Mrs. Aldena Paxton, of Columbia, Pennsylvania, and Dr. J. F. Kelly, of Indianapolis, were married in Vincennes, June fourteenth.

Miss Aline Welsheimer, of Columbia City, and Dr. George Kress, of Warsaw, were married June fourteenth in Columbia City.

Muncie was host June tenth and eleventh to the thirteenth annual session of the colored physicians belonging to the Indiana State Medical, Dental, and Pharmaceutical Association.

Dr. L. P. Harshman, of Fort Wayne, discussed the subject of "Selective Sterilization" at the meeting of the Delaware County Bar Association June fifth. The meeting was open to the public.

Dr. John B. Berteling, of South Bend, has been given a life membership by the Knights of Columbus, for distinguished service. The honor was the first of its kind issued by the local council.

Dr. Douglas W. Owen, of South Bend, has purchased the Pennington Sanitarium, north of South Bend, and has taken over its management. It will be known as the St. Joseph Valley Sanitarium.

Dr. William P. Alexander, of Gary, was the honor guest at a testimonial dinner, May eighteenth. Dr. Alexander has completed forty years of continuous service as examiner for the Metropolitan Life Insurance Company.

Dr. Theophilus Zimmerman, age fifty-nine, pathologist of the Rose Dispensary in Terre Haute, died May fourteenth. Dr. Zimmerman had been with the Rose Dispensary since its opening, thirty-six years ago.

Dr. R. Clyde White has resigned his position as professor of sociology and director of the bureau of social research at Indiana University, and has accepted a position at the University of Chicago as professor in the school of social service administration.

Dr. A. E. Hubbard, of Peoria, Illinois, has been appointed superintendent of the Marion County Tuberculosis Hospital at Sunnyside to succeed Dr. William McQueen who resigned. Dr. Hubbard is a native of Mooresville, Indiana.

Dr. C. J. McIntyre, of Indianapolis, addressed the Daviess County Tuberculosis Association, June ninth, at Washington. His subject was "Tuberculosis as a Family Disease." The public was invited to attend the meeting.

On June sixth the cornerstone of a \$300,000 Hall of Biology Study and Research was laid at the University of Notre Dame. The building will be constructed this summer. A new 100-patient student infirmary at Notre Dame has been completed only recently.

Dr. S. D. Malouf, of Peru, has gone to Vienna where he will take some postgraduate work, and to be with Mrs. Malouf and their two daughters, who have been visiting Mrs. Malouf's mother in Vienna. Dr. Malouf and his family will return to Peru in October.

Dr. Everett D. Plass, professor of Obstetrics and Gynecology in the University of Iowa, talked on "Simplified Obstetric Care" at the annual meeting of St. Mary's Hospital Staff, in Evansville, May twenty-eighth. Physicians of the tri-state area were invited to attend.

Members of the Fort Wayne Academy of Medicine elected Dr. C. B. Parker president, Dr. Walter E. Kruse vice-president, and Dr. G. T. Bowers secretary-treasurer, at the annual meeting of the organization held May twenty-sixth. This meeting concluded the activities of the society until next September.

Dr. Frank T. Moore, formerly of Muncie, who has been on the staff of the University of Michigan for the past three years, has been made director of the department of Radiology of the City Hospital of Akron, Ohio. Dr. Moore maintains his membership in the Delaware-Blackford County Medical Society.

The Indianapolis board of public health has authorized payment of the final fifteen per cent of construction costs for the Flower Mission Hospital unit for tuberculosis patients. Total cost of the building is approximately \$180,000. The PWA is sharing in construction costs. It is expected that the new unit will be available for service by the first of the year.

The 1936 graduate fortnight of the New York Academy of Medicine will be held October 19 to 31, and will be devoted to a consideration of "Trauma; Occupational Diseases and Hazards." Complete program and registration blank may be secured by addressing Dr. F. P. Reynolds, New York Academy of Medicine, 2 East 103rd Street, New York City.

Dr. William Province, of Franklin, has left for a three-month trip to the arctic as physician and surgeon for Capt. Robert H. Bartlett. The Smithsonian Institution and the Chicago Zoological Society are sponsoring the expedition.

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The War Department is anxious to increase membership in the Medical Reserve Corps. Any member of the Indiana State Medical Association desiring to accept a commission in the Medical Reserve Corps of the United States Army is asked to write or call in person at the Headquarters, Indiana Military Area, Second Floor, Chamber of Commerce Building, Indianapolis.

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Dr. Isidor S. Ravdin, son of Dr. Marcus Ravdin, of Evansville, has been made head of a new department of research surgery in the University of Pennsylvania. According to newspaper announcements, the department is endowed through the will of the late George L. Harrison, chemical manufacturer, and the department will have an income of \$40,000 per year for use in surgical research exclusively.

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Officers for the Fort Wayne Medical Society were elected at the May nineteenth meeting, as follows: President, Dr. Herbert M. Senseny; vice-president, Dr. R. B. McKeeman; secretary, Dr. R. L. Hane; treasurer, Dr. E. L. Cartwright; delegates, Dr. Maurice Lohman and Dr. William C. Wright; alternate delegates, Dr. E. R. Carlo and Dr. D. W. Shafer; board of trustees (term three years), Dr. L. P. Harshman and Dr. A. J. Sparks.

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PWA appropriations have been set aside for hospital construction on Indian reservations in Montana, South Dakota, North Carolina, and Minnesota, the Department of the Interior has announced. Other hospitals already are under construction, and two units have recently been completed. The total amount available for all these projects is \$1,870,026. Approximately 1,000 beds will have been added to the facilities for Indians when the work is finished.

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Indiana Clinical Laboratory Technicians held a meeting in Indianapolis, June 5th and 6th, at the Indianapolis City Hospital. Trips through the Eli Lilly and Company main plant and research building and through the biological laboratories at Greenfield were enjoyed. Papers were presented by Dr. H. M. Banks, Dr. G. F. Kempf, Miss Bonita Carlson, Dr. O. N. Helmer, Dr. H. K. Langdon, Dr. Edgar F. Kiser, and Dr. Bennett Kraft.

Dr. Clyde G. Culbertson, of Indianapolis, director of the central laboratories of the Indiana University School of Medicine and of the laboratories of the State Board of Health, was designated recipient of the first annual distinguished service award of the Indianapolis Junior Chamber of Commerce May twenty-seventh. The citation is limited to men less than thirty-five years old, and the purpose is to recognize outstanding work that has resulted in important civic service.

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The Woman's Auxiliary to the Indianapolis Medical Society gave a style show and tea in the L. S. Ayres auditorium, May second. Mrs. Walter P. Morton was hostess chairman, and she was assisted by Mesdames Roy Myers, Marlow Manion, Cleon A. Nafe, F. W. Overman, Ross Ottinger, Dudley A. Pfaff, Everett E. Padgett, Thurman B. Rice, Karl R. Ruddell, James O. Ritchey, M. J. Spencer, Bernard Rosenak, Byron K. Rust, Walter Pennington, and R. J. Peters.

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For 1936-1937, newly elected officers for the Indianapolis Woman's Auxiliary are: President, Mrs. Louis D. Belden; president-elect, Mrs. W. P. Morton; first vice-president, Mrs. C. A. Stayton; second vice-president, Mrs. Clarke Rogers; third vice-president, Mrs. Lester Smith; corresponding secretary, Mrs. John Warvel; recording secretary, Mrs. G. W. Gustafson; treasurer, Mrs. Harry VanOsdol; publicity chairman, Mrs. B. E. Ellis.

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In addition to the articles already enumerated, the following have been accepted by the Council on Pharmacy and Chemistry of the American Medical Association:

Bilhuber-Knoll Corporation  
Hypodermic Tablets of Metrazol 1½ grains  
Hospital Liquids, Inc.  
Ringer's Solution  
Dextrose 5% in Distilled Water  
Dextrose 5% in Physiologic Solution of Sodium Chloride  
Dextrose 10% in Distilled Water  
Dextrose 10% in Physiologic Solution of Sodium Chloride  
Dextrose 25% in Distilled Water  
Lederle Laboratories, Inc.  
Refined Alum Precipitated Tetanus Toxoid-Lederle  
Parke, Davis & Co.  
Compressed Tablets Sal-Ethyl Carbonate with Phenacetin  
  
The following articles have been accepted for inclusion in the List of Articles and Brands Accepted by the Council But Not Described in N. N. R. (New and Nonofficial Remedies, 1935, p. 445):  
Hospital Liquids, Inc.  
Physiologic Solution of Sodium Chloride  
Lederle Laboratories, Inc.  
Smallpox Vaccine (Lederle) (Preserved with Brilliant Green)  
United States Standard Products Co.  
Magnesium Sulphate 25% in 5 cc. Ampuls

## INDIANA UNIVERSITY NEWS NOTES

Twenty-five independent research studies were completed during the past year at the Indiana University Medical Center and the findings have been published or accepted for publication by leading medical and surgical publications.

Research appointments for the coming school year include the reappointment of Dr. Hugh Martin, Gustavus Peters and James Moss.

Of particular interest is a study by clinical pathologists dealing with identification of blood spots for medico-legal purposes. This study represents the development of a procedure which will enable the technicians, after differentiating between human and animal blood stains, to classify human blood into four major groups. The test has practical application in the solution of crime since it aids authorities to identify blood found on the clothing or car of a suspect or on fixtures at the scene of a crime.

A related test procedure has improved materially the methods used in determining the compatibility of bloods for transfusion purposes.

A startling reduction in hospitalization time in cases of empyema was reported in another research report. A change in operative methods was developed which brought about a reduction in time from 68 days in the hospital for the average case to 14 days. The reduced time was found satisfactory in 25 cases with no resulting deaths.

Treatment of strabismus or crossed-eyes was the subject of one research study. Other research reported dealt with the use of pectin, treatment of peritonitis, infant diarrhea and growth promoting substances.

Twenty-one independent studies now in process were reported and a number of new projects were approved for study.

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The graduating class of more than 1,000 members participating in the 106th annual Commencement exercises of Indiana University Monday, June 15, included 108 from the School of Medicine, 20 from the Training School for Nurses, and 28 from the School of Dentistry. Dr. George E. Vincent, New York, educator, was the Commencement speaker, and Dr. Harold Leonard Bowman, pastor of the First Presbyterian Church, Chicago, gave the baccalaureate sermon.

Graduates of the School of Medicine include the following: Raymond N. Adler, Evansville; Loren F. Ake, Bernard Cohen, James Crawford, William H. Crays, Herbert Egbert, Charles A. Fiel, Jr., Norval Folkening, Simon Gold, Kenneth Higgins, Gilson Hild, Sidney A. Kauffman, Wendell Kelly, Samuel Klor, Charles H. Maly, Lewis Pollak, Robert Price, Clayton L. Rice, Russell Rollins, William B. Smith,

Herbert T. Wagner, Jr., and Harvey E. White, Indianapolis; J. Lynn Arbogast, Monmouth, Ill.; Frank B. Bard, Crothersville; Douglas F. Barkley, Odon; Ralph Beams, Spencerville; Terrence Billings and Ralph Kraft, Valparaiso; Charles Bowman, Albion; Max Brenner, Winchester; Henry A. Brocksmith, Freelandville; David B. Brown, Donald T. Rendel and Louis Spolyar, Gary; Herschel Bundrant and Louis Walther, Rushville; Wallace E. Childs, Madison; William Cockrum, L. P. Hart, Everett Mason, Charles Moehlenkamp, Clarence Reich, and Herman Watson, Evansville; Thomas M. Conley, Kokomo; Chester Conway, McCordsville; John A. Davis, Herbert McMahan, Anderson; Russ Denzler, Jeffersonville; David Doktor and Abraham Jackson, Paterson, New Jersey; Albert Donato and Richard Johns, Bloomington; Milton Erdel and George E. Scott, Frankfort; John Ferry, Akron; Ben Firestein, Josephine Murphy and Burton V. Scheib, South Bend; Edson Fish, Elkhart; Max Ganz and Lester Renbarger, Marion; Richard Gery, Lafayette; Ralph Gettelfinger, Ramsey; Merrill Goodwin, Selma; Ross Griffith, Peru; Joseph Hanmer, Bloomingdale; John S. Hash, Bicknell; Joseph Haymond, Waldron; Ralph O. Hippenstein, North Manchester; Robert E. Holsinger and Elmer Zweig, Fort Wayne; John W. Humphreys, Bicknell; Craig Jones, Knox; James Kirtley and Norman Peacock, Crawfordsville; Homer L. Life, Muncie; James McFadden, Jr., Bedford; Jack McKittrick, Washington; Don Mattox, Richard Morton, James F. Openshaw, Terre Haute; Orlando Meyer, Bluffton; Charles J. Miller, Greensburg; Robert Myers, Chili; Francis Nusbaum, Cass; Robert Oliphant, Farmersburg; Milton Omstead, Angola; Elroy Pasterнак, Passaic, New Jersey; Albert Ratcliffe, and John Van Nuys, Newcastle; John I. Rinne, Jr., Lapel; Arthur Rosenthal and Irwin I. Rosenthal, East Chicago; Marion Roudubush, Noblesville; Winfield Scott, Jr., Shelbyville; James B. Seamon, Mishawaka; Jack Shields, Brownstown; Gerald Shortz, LaCrosse; Donald Spahr, Portland; Daniel Stiver, Goshen; Vergil K. Stoeling, Freelandville; Howard Sweet, Richmond; Milton Tepfer, Brooklyn, New York; John M. Thompson, Tyner; Forrest Tomlinson, Franklin; Robert D. Turner, Farmland; Charles O. Weddle, Lebanon, and James V. White, Rosedale.

The following are graduates of the Nurses' Training School; Maxine Albert and Pauline Albert, Fairmount; Margaret Brosey, Terre Haute; Margaret Carpenter, Arcadia; Signa June Carson, Logansport; Mary Virginia Copeland, Elizabeth Oglesby, Marriet Skillman and Catherine Stewart, Indianapolis; Agnes Gromer, West Baden; Wilda Hughes, Montpelier; Maxine Maxwell, Delphi; Lilian Rasp, Boggstown; Kathaleen Rowe, Anderson; Ethel Secord, Kokomo; Florine Skaggs, Newcastle; Roma Smiley, Judson; Helen Snyder, Vincennes; Josephine Westfall, Odon; Helen C. Wine, Winchester.

Dental School graduates include: Albert R. Adams and Louis D. Spector, East Chicago; William Allen, Xenia, Ohio; Harry Barton, Whiting; Donald Berry, Harold Crockett, and Raymond Wurtz, Indianapolis; Elmer Bosselmann and Irvin Weinraub, Fort Wayne; Charles Conally, Jr., Detroit, Michigan; Louis Dohen, Paterson, New Jersey; Merle Drew and Joseph Mohr, Terre Haute; Torrence Eckerty, Eckerty; William L. Hammersley, Jr., Frankfort; John L. Heidenreich, Bicknell; Charles Kirschenblut, Passaic, New Jersey; Frank Loskot, Newark, New Jersey; George Maurer, Brazil; David Pash, Jersey City, New Jersey; Robert Peden, Salem; Warren A. Roll, Hamilton, Ohio; Chester A. Rycroft, Jr., Evansville; Lee M. Scholnik, Canton, Ohio; Arthur W. Spivey, Thorntown; Robert E. Timmerman, Batesville; Joseph F. Volker, Elizabeth, New Jersey; Robert E. Wilson, Richmond.

Don Mattox, of Terre Haute, was the winner of the Ravdin medal at the Indiana University School of Medicine this year. This award is made annually to the senior of the I. U. medical school who has the highest scholastic average during the four-year course in the I. U. School of Medicine. Mattox received the M.D. degree from I. U. June 15.

Thirteen members of the senior class and four members of the junior class of the Indiana University School of Medicine have been elected to membership in Alpha Omega Alpha honorary scholastic medical fraternity.

Juniors chosen for membership in the scholastic organization are: Lintner Clark, Muncie; Carl S. Culbertson, Vevay; Theodore Hilbush, Bristol, and Frank Scott, Shelbyville.

Members of the senior class elected are: J. Lynn Arbogast, Monmouth, Illinois; Douglas F. Barkley, Odon; Herbert L. Egbert, Indianapolis; John L. Ferry, Akron; Charles Fiel, Indianapolis; Richard E. Gery, Lafayette; Ralph A. Gettelfinger, Ramsey; Max Ganz, Marion; Homer L. Life, Muncie; Orlando Meyer, Bluffton; Robert M. Price, Indianapolis; Wendell C. Kelly, Indianapolis, and Donald T. Rendel, Gary.

Dr. Edward W. Koch, who received the A.B. degree from Indiana in 1908 and the A.M. in 1909, recently was appointed dean of the medical and dental schools at the University of Buffalo. Dr. Koch, a graduate of the Rush Medical College, became professor of pharmacology at the University of Buffalo Medical School in 1918. He was named secretary of the school the same year and two years later he was appointed acting dean and in 1930 full dean. He is a Fellow of the American Medical Association and of the Indiana Academy of Science.

## SOCIETIES — INSTITUTIONS

### COUNTY SOCIETY REPORTS

BOONE COUNTY MEDICAL SOCIETY members met at Lebanon, June second. Dr. Robert Moore, of Indianapolis, was the principal speaker, his subject being "Cardiac Emergencies, Their Diagnosis and Treatment."

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CLINTON COUNTY MEDICAL SOCIETY members met at the Coulter Hotel, Frankfort, June fourth, for a social evening. Moving pictures were shown by Drs. A. G. Chittick, J. A. VanKirk, and Dr. Ketcham. This was the annual dinner meeting, and was attended by a majority of the members and their wives.

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DEARBORN-OHIO COUNTY MEDICAL SOCIETY met June fourth at Lawrenceburg. Dr. William Doughty, of Cincinnati, delivered a talk on "Diagnostic and Therapeutic Measures in X-Ray."

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DELAWARE-BLACKFORD COUNTY MEDICAL SOCIETY met in the Hotel Roberts, Muncie, May nineteenth, with Dr. Tom Owens and Dr. Donald Covalt as principal speakers. Reports on the A. M. A. convention in Kansas City were given. Attendance numbered eighteen.

Delaware-Blackford County Medical Society members and their wives attended a picnic at the lodge of Dr. Will C. Moore, north of Yorktown, June third.

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FAYETTE-FRANKLIN COUNTY MEDICAL SOCIETY held a dinner meeting at Magnesia Springs, June ninth. Dr. E. E. Padgett of Indianapolis discussed social security legislation.

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FOUNTAIN-WARREN COUNTY MEDICAL SOCIETY met at Covington, June fourth, for the fourteenth annual catfish dinner. Principal speaker was Dr. Robert M. Moore, of Indianapolis, who talked on "Cardiovascular Diseases."

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FORT WAYNE (ALLEN COUNTY) MEDICAL SOCIETY held its annual election of officers at the May nineteenth meeting in the Chamber of Commerce, Fort Wayne. Fifty-nine members were present. Officers for 1936-1937 are: President, Herbert M. Sensey; vice-president, R. B. McKeeman; secretary, R. L. Hane; treasurer, E. L. Cartwright; delegates, Maurice Lohman and William C. Wright; alternates, E. R. Carlo and C. W. Shafer; board trustees (three-year term), L. P. Harshman and A. J. Sparks. New officers will be installed at the first meeting of the society next fall.

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Fort Wayne Medical society members held their annual stag outing at the Fort Wayne Country Club, June ninth. A golf tournament was held in the afternoon, followed by a banquet and entertainment in the evening. This event concluded the activities of the society until the fall season.

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GIBSON COUNTY MEDICAL SOCIETY held a meeting in the Hotel Emerson at Princeton, June eighth, with Dr. Paul D. Crimm, of Evansville, as principal speaker. Dr. Crimm's subject was "Surgical Treatment of Pulmonary Tuberculosis." Attendance numbered twenty-four.

The July meeting of the society will be held at the Southern Hospital for the Insane, at Evansville, upon invitation of the superintendent, Dr. John H. Hare.

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GRANT COUNTY MEDICAL SOCIETY members met in the Hotel Spencer, Marion, May twenty-eighth, when Dr. Frank Gastineau, of Indianapolis, talked on "Skin Diseases." About thirty-five physicians attended.

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GREENE COUNTY MEDICAL SOCIETY held the final meeting of the season at the Freeman-Greene County Hospital, in Linton, May fifteenth. The next meeting of the society will be held in September.

HAMILTON COUNTY MEDICAL SOCIETY members held their monthly meeting in Sheridan, May twelfth. Dinner was served by auxiliary members. Dr. R. N. Harger, of Indianapolis, spoke on "Poison and Poisoners."

The June meeting of the Hamilton County Medical Society members met at Carmel in the country home of Dr. Ross Cooper. Dr. L. A. Ensminger, of Indianapolis, was the principal speaker.

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HENDRICKS COUNTY MEDICAL SOCIETY met in Danville, May twenty-sixth. Speakers were Drs. K. H. Wiseheart, Salem; Marjorie Morrison, Danville, and J. W. Gibbs, Danville. Subjects discussed were "Sarcoma" and "Diseases of the Liver." Fifteen members were present.

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INDIANAPOLIS MEDICAL SOCIETY members held their May nineteenth meeting at the Athenaeum, to hear a symposium on "Clinical Diagnosis in Contrast with X-Ray Diagnosis" from the standpoint of the internist (Dr. Lyman Pearson), the otolaryngologist (Dr. Bert E. Ellis) and the roentgenologist (Dr. Chester Stayton). Dr. James H. Stygall was the discussant.

The annual spring frolic of the Indianapolis society was held at the Athenaeum, May twenty-sixth, with Drs. Bert Ellis, Ferd Weyerbacher and Herman Morgan sponsoring the entertainment. This meeting was limited to members of the society and their families.

On June third the annual society golf tournament was held at the Speedway golf course in Indianapolis.

The members of the Indianapolis Medical Society were invited by the Indiana State Pediatric Society to attend their annual dinner meeting at the Indianapolis Athletic Club, June eighth. Dr. P. C. Jeans, of the University of Iowa, talked on "Nutrition" and Dr. Irvine McQuarrie, of the University of Minnesota, talked on "Edema."

The annual golf battle between physicians and dentists in Indianapolis was held at the Broadmoor Country Club, June seventeenth. The dentists won the cup last year. Results of this year's tournament are not known at press time.

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JASPER-NEWTON COUNTY MEDICAL SOCIETY met in the McKeever Hotel, Rensselaer, May twenty-eighth, with Dr. Harry E. English as host. Principal speaker was Dr. George Garceau, of Indianapolis, who spoke on "Diseases of the Joints." Twelve members and four guests attended.

The June meeting of the Jasper-Newton County Medical Society was held at Rensselaer, June fourth, with Dr. Harry English as host.

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JAY COUNTY MEDICAL SOCIETY met at the Portland Country Club, June fifth, to hear a symposium on obstetrics. Dr. J. E. Nixon discussed "Prenatal Care," Dr. J. M. Hueckamp talked on "Conduct of Labor in the Home," Dr. C. P. Hinckman discussed "Post Partum Care," and Dr. F. E. Keeling talked about "Care of the Newborn."

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JEFFERSON COUNTY MEDICAL SOCIETY met at the Hillside Hotel, Madison, May twenty-fifth. Dr. Goethe Link, of Indianapolis, presented a paper on "Some of the Less Obvious Thyroid Diseases and Their Diagnosis and Treatment." Twelve members attended.

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KOSCIUSKO COUNTY MEDICAL SOCIETY met at Dr. Yocum's office in Mentone, May twelfth, with Dr. A. C. McDonald, of Warsaw, as principal speaker. Dr. McDonald's subject was "Physiological Action of Digitalis." Attendance numbered seventeen.

Kosciusko County Medical Society members were entertained by Father Mattox, of Plymouth, who presented a series of magic tricks, at the June ninth meeting held in Warsaw. By previous arrangement, the Kosciusko County Medical Society holds an annual joint meeting with the Marshall County society; the place of meeting is supplied one year and the program the next year by each society. This meeting was sponsored by the Kosciusko County society at Warsaw, and the Marshall County society supplied the entertainment.

LAKE COUNTY MEDICAL SOCIETY members enjoyed an "all Indiana University" program at Crown Point, May twenty-seventh. Dinner was served by the American Legion Auxiliary at Crown Point. Approximately eighty members attended the meeting, which was the last one of the summer session. Speakers included Dr. W. D. Gatch, Dr. Matthew Winters, Dr. R. A. Solomon, Dr. R. L. Glass, Dr. George S. Bond, and Dr. R. N. Harger.

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MARSHALL COUNTY MEDICAL SOCIETY'S annual dinner meeting was held at the Country Club at Plymouth, June tenth. Golf in the afternoon and dinner in the evening was followed by an address by Dr. George S. Bond, of Indianapolis, whose subject was "Heart Sounds."

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MONROE COUNTY MEDICAL SOCIETY held its annual spring meeting June eleventh, at Bloomington. Dr. Virgil Simpson, of Louisville, was the principal speaker.

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MORGAN COUNTY MEDICAL SOCIETY members met in Martinsville, May twentieth, for a dinner meeting. Dr. Enzmett Lamb, of Indianapolis, told of his medical experiences in South American countries.

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MUNCIE ACADEMY OF MEDICINE elected Dr. T. R. Owens president to succeed Dr. W. J. Quiek, at the dinner meeting held in Muncie, June second. This was the final meeting of the season. Meetings will be resumed in October. Dr. L. G. Montgomery was made vice-president and Dr. T. R. Hayes is the new secretary. The treasurer, Dr. W. J. Molloy, was re-elected.

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PARKE-VERMILLION COUNTY MEDICAL SOCIETY members met at the Vermillion County Hospital in Clinton, May twentieth. Dr. Karl Ruddell, of Indianapolis, talked on "Cancer of the Lower Bowel."

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RANDOLPH COUNTY MEDICAL SOCIETY members met at the Randolph County Hospital, June eighth, for their regular monthly meeting. Motion pictures on obstetrics were shown.

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RUSH COUNTY MEDICAL SOCIETY members attended a dinner meeting at the Lollis Hotel in Rushville, May nineteenth. Dr. Bennett Kraft, of Indianapolis, was the principal speaker.

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ST. JOSEPH COUNTY MEDICAL SOCIETY members met at Healthwin Hospital, May twenty-seventh, to hear Dr. Henry C. Sweany, of Chicago, and Dr. Karl J. Henrickson, of Chicago, who discussed pulmonary conditions.

At the May nineteenth meeting, which was held in the Jefferson Plaza, Dr. Milo K. Miller discussed "Allergy." Attendance numbered thirty-five.

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TIPPECANOE COUNTY MEDICAL SOCIETY held a meeting June ninth at Colburn, Indiana. Principal speaker was Dr. R. L. Sensenich, of South Bend, whose subject was "Political Trends Today Affecting Medical Practice."

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VANDERBURGH COUNTY MEDICAL SOCIETY members met at St. Mary's Hospital, Evansville, May twenty-eighth, with Dr. Everett Plasz, of the University of Iowa, as principal speaker. His subject was "Simplified Obstetrics." Attendance numbered ninety.

The June ninth meeting of the Vanderburgh County Medical Society was held at the Welborn Walker Hospital in Evansville. Dr. Burton D. Myers, of Bloomington, talked on "Sympathetic Nervous System." Dr. Charles L. Seitz presented a case report on "Adhesive Pericarditis."

The May twenty-eighth meeting was a dinner meeting held jointly with the St. Mary's Hospital staff.

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WABASH COUNTY MEDICAL SOCIETY met at Wabash, June third, to hear Drs. J. E. Pilcher, F. B. Ramsey and John Greist, all of Indianapolis, discuss "Postoperative Complications and Their Treatment." Attendance numbered thirteen.

WAYNE-UNION MEDICAL SOCIETY met at Liberty, June eleventh, for the last spring meeting. Dr. Henry B. Freiberg, of Cincinnati, spoke on "Management of Prostatism." The society will resume its meetings in the fall.

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### INDIANA STATE MEDICAL ASSOCIATION BUREAU OF PUBLICITY

April 21, 1936.

Meeting called to order at 3:30 p. m.

Present: W. N. Wishard, M.D., chairman; F. M. Gastineau, M.D.; E. Vernon Hahn, M.D., and T. A. Hendricks, executive secretary.

Release, "May—the Health Publicity Month," approved for publication in April 27 papers.

Report on medical meeting:

March 18—Parke-Vermillion County Medical Society, Clinton, Indiana. "Oral Pathology of Interest to Both the Medical and Dental Professions." (30 present.)

Requests for speakers:

April 22—Kiwanis Club, Muncie. Speaker obtained to talk on "A Layman Looks at Medicine."

May 7—Fountain-Warren County Medical Society, Perrysville. Speaker to be obtained.

Suggested bulletin, prepared by one member of the Bureau, that is to be sent to newspaper editors, brought to the attention of the Bureau. The Bureau suggested that the member who prepared this outline give further study to this matter and develop his idea in detail for the future consideration of the Bureau.

Pamphlet from the United States Public Health Service giving venereal disease information was brought to the attention of the Bureau by one of its members. A motion was made and carried that this pamphlet be summarized in order that an article may be prepared for release to the newspapers.

Bulletin issued by the Public Relations Bureau of the Medical Society of the State of New York brought to the attention of the Bureau. This bulletin, which is the fourth of a series that is being issued by this committee, was turned over to one member of the Bureau and the secretary was instructed to write for copies of the previous bulletins and send them to this physician in order that he may make a detailed study of these bulletins and report his findings to the Bureau.

Letter received from the librarian of the Indiana University School of Medicine stating that the library did not have the book written by Dr. W. W. Keen on "What Vivisection Has Done for Humanity." The Bureau instructed the secretary to make an attempt to obtain a copy of this book from the library of the New York Academy of Medicine or from the professor of pathology at the Jefferson Medical College of Philadelphia.

A bulletin from the Woman's Auxiliary having special reference to the Jane Todd Crawford memorial was brought to the attention of the Bureau. The secretary was instructed to make copies of those parts of the bulletin having reference to Jane Todd Crawford and have them ready to distribute at the next meeting of the Bureau, to which is to be invited the officers of the Woman's Auxiliary to the Indiana State Medical Association and the members of the Auxiliary Pioneer Memorial Committee.

A note was received from the secretary of the Fountain-Warren County Medical Society in answer to a communication concerning the grave of Dr. John Lambert Richmond, who did the first caesarean section west of the Alleghenies in 1827 in the then U. S., at Newton, Ohio. This note stated, "We have been searching for a year for his grave (Dr. Jonathan Richmond's) and hope yet to locate it." The chairman of the Bureau stated that he might have a clue which would aid in locating Dr. Richmond's grave.

### THIRD DISTRICT MEDICAL SOCIETY

The Third District Medical Society held its semi-annual dinner meeting in the New Albany Country Club, May twentieth, with the Floyd County Medical Society as host for the occasion.

Dr. Parvin M. Davis of New Albany read a paper on "Fractures"; Dr. A. M. Baxter, Salem, talked on "Obstetrics," and Dr. Matthew Winters of Indianapolis read a paper on "Infant Life." Dr. George Dillinger, of French Lick, presided and introduced the various speakers.

The fall meeting of the society will be held at Spring Mill Park in October or November.

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### FOURTH DISTRICT MEDICAL SOCIETY

The physicians of southeastern Indiana met in Greensburg May twentieth for the thirty-second annual session of the Fourth District Medical Society. Members of the Decatur County Medical Society were hosts.

Physicians from Jackson, Jennings, Ripley, Jefferson, Dearborn, Switzerland, Ohio, Bartholomew and Decatur counties were in attendance.

A golf tournament held in the morning resulted in awards to Dr. George A. May, Madison, low gross; Dr. W. L. Green, Columbus, low net, and Dr. J. T. Carney, Batesville, second low net.

In the afternoon, Dr. P. C. Bentle presided. Dr. Bentle presented a paper on "Medical Russia." Dr. W. H. Stemm, of North Vernon, talked on "Non-calculus Cholecystitis," and Dr. M. C. McKain, of Columbus, spoke on "The Uses and Results of Sympathectomy." Dr. Louis Segar, of Indianapolis, discussed diseases of children; Dr. Howard Mettel, of Indianapolis, explained the purposes of the new maternal and child health bureau of the Indiana Division of Public Health, and Mr. Thomas A. Hendricks, executive secretary of the Indiana State Medical Association, discussed the social security act.

Dr. Max Bahr, of Indianapolis, was the principal speaker at the banquet meeting in the evening. His subject was "The Nature of Mental Diseases."

Officers were elected as follows:

W. H. Stemm, North Vernon, president.

E. C. Trotter, Madison, vice-president.

D. S. McAuliffe, North Vernon, secretary.

M. C. McKain, Columbus, councilor.

The physicians in attendance went on record as favoring the establishment of a tuberculosis sanatorium in southern Indiana.

The 1937 meeting of the Fourth District Medical Society will be held in North Vernon.

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### SIXTH DISTRICT MEDICAL SOCIETY

The Sixth District Medical Society met in Shelbyville, May twenty-first, at 10 a. m.

A talk on "Cardiac Irregularities and Their Treatment" was made by Dr. Johnston McGuire, of Cincinnati. Dr. L. J. Segar, of Indianapolis, talked on "Pediatrics."

In the afternoon, Dr. H. H. Wheeler presented an illustrated lecture on "Rectal Diseases Most Frequently Encountered in General Practice." Dr. H. B. Mettel, of Indianapolis, discussed the relation of the Indiana Bureau of Maternal and Child Health to the local medical society. Dr. B. G. Keeney, of Shelbyville, talked on "Cancer."

The 1937 meeting will be held in Greenfield in May.

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### NINTH DISTRICT MEDICAL SOCIETY

The Ninth District Medical Society held its annual meeting in Lafayette, May nineteenth.

Morning and afternoon programs were presented before the largest number of registrants in the history of the district organization. Attendance was estimated at 200.

The programs were presented at St. Elizabeth Hospital at Lafayette. Dr. Frederick A. Collier, of the University of Michigan, spoke on "Acute Abdomen." In the afternoon speakers were Dr. Jerome Head, Chicago; Dr. Clarence Earl, Des Plaines, Ill., and Dr. Robert J. Masters, Indianapolis.

In the evening a banquet at the Purdue University Union Building concluded the meeting. Banquet speakers included Dr. Edmund D. Clark, of Indianapolis, and Dr. F. T. Rombberger, of Lafayette.

Officers were elected as follows:

President, Dr. Robert J. Millis, Crawfordsville.  
Vice-president, Dr. M. E. Gross, Ladoga.  
Secretary, Dr. John L. Sharp, Crawfordsville.  
The 1937 meeting will be held in Crawfordsville.

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### ELEVENTH DISTRICT MEDICAL SOCIETY

The fifty-fifth semi-annual meeting of the Eleventh Indiana Councilor District Medical Society was held May twentieth, at Marion, with headquarters in the Spencer Hotel.

At 10 o'clock in the morning Dr. Andrew L. Banyai, of Wauwatosa, Wisconsin, conducted a clinic on "Childhood Tuberculosis." In the afternoon, following a business meeting, Dr. L. G. Montgomery, of Muncie, presented a paper on "The Primitive Tubercle"; Dr. Andrew L. Banyai talked on "Modern Aspects of the Treatment of Tuberculosis in General Practice" and Dr. Arthur B. Richter, of Flora, discussed "The Treatment of Nephritis."

A banquet was served in the Hotel Spencer at 6 o'clock. James Chardonnier, Ph.D., Upland, discussed "The Present European Situation" at the banquet meeting.

More than 100 physicians attended the meeting.

Officers were elected as follows:

President, Dr. M. J. Lewis, Marion.  
Secretary-treasurer, Dr. O. G. Brubaker, North Manchester  
Councilor, Dr. Ira E. Perry, North Manchester.  
Necrologist, Dr. G. G. Richardson, Marion.

The next meeting will be held at Huntington in October.

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### TWELFTH DISTRICT MEDICAL SOCIETY

More than one hundred physicians and guests attended the meeting of the Twelfth District Medical Society at Potawatomi Inn, Lake James, May twenty-eighth. The Northeastern Indiana Academy of Medicine met with the district society.

Speakers included Dr. E. D. Clark, Indianapolis, president-elect of the Indiana State Medical Association; Dr. H. B. Mettel, Indianapolis; Thomas A. Hendricks, Indianapolis; H. M. Senseny, Fort Wayne; Dr. R. L. Sensenich, South Bend; and at the evening banquet meeting, Dr. Edward Deiterle, of Ann Arbor, Michigan, discussed the psychological aspects of marriage.

Officers were elected as follows:

President, Dr. C. E. Munk, Kendallville.  
Vice-president, Dr. B. W. Rhamy, Fort Wayne.  
Secretary, Dr. A. J. Sparks, Fort Wayne.  
Councilor, Dr. E. M. VanBuskirk, Fort Wayne.

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### UNION DISTRICT MEDICAL ASSOCIATION

The Union District Medical Association held its 136th semi-annual meeting at the Westwood Country Club, Newcastle, May twenty-eighth.

The meeting was opened at 10:30 a. m.

The program included papers by Albert Stump, attorney for the Indiana State Medical Association, on "The Doctor and the Law"; Dr. M. M. Zinninger, Cincinnati, on "Treatment of Acute Head Injuries"; Dr. L. D. Carter, Indianapolis, on "The Neuroses"; Dr. C. J. McIntyre, Indianapolis, on "Observation in Tuberculosis"; and Dr. George Wiggins, Newcastle, "Industrial Dermatitis."

The membership roster of the Union District Society includes physicians in southern Indiana and Ohio.

Officers for 1936 are Dr. E. O. Bauer, Middletown, Ohio, president; Dr. F. E. Hagie, Richmond, vice-president; and Dr. Edgar C. Denny, Milton, secretary-treasurer.

### WOMAN'S AUXILIARY TO THE INDIANA STATE MEDICAL ASSOCIATION

#### ANNUAL REPORT

#### MADE TO THE NATIONAL ORGANIZATION AT KANSAS CITY, 1936

The Auxiliary to the Indiana State Medical Association, under the guidance of its advisory council, continues to labor with a smile in this great field of opportunity. All committee chairmen are active.

Two new counties have joined our state family, and interest in other quarters indicates more in the near future. Our membership has increased.

A circulating library of health program material has been inaugurated, with the program chairman in charge.

Both educational and philanthropic work have been accomplished by our public relations chairman. There has been cooperation with the Parent-Teacher Associations in their health programs, in practically all organized counties, and speakers provided for some. Practically all of our members are affiliated with lay organizations, and splendid cooperation with these is manifested. One unit is arranging trips (with lectures) through a general hospital, for representative high school groups. Several of our units give regularly of their time to hospitals, making dressings, layettes, or mending. One group has provided a circulating library for their hospital, and they keep this cart filled with books and magazines for the benefit of patients who want them. Books have been added to the physicians' libraries, in hospitals, by some of our groups. *Hygeia* subscriptions have been given to 19 schools, our *Hygeia* chairman, with the assistance of her county chairman, earning the funds to provide these subscriptions by selling rummage and having a benefit bridge. Press and publicity chairman has provided some Auxiliary news for each of the past few issues of our *STATE MEDICAL JOURNAL*. We feel that Auxiliary news items in *THE JOURNAL* may stimulate interest in unorganized quarters.

Our chairman of legislation is ever at her post of duty, and happy in the result of those measures, in the Public Welfare Bill, which might have been less kind to the physicians of our state.

A careful and accurate history of our organization is kept.

Our new committee, the pioneer memorial committee, has been active in securing data and devising means whereby we may honor the following four medical pioneers of Indiana:

*Mrs. Jane Todd Crawford*, patient of Dr. Ephraim McDowell, was the pioneer heroine of surgery. (Buried near Sullivan, Indiana.)

*John L. Richmond, M.D.*, who is believed to have done the first cesarean section west of the Alleghany Mountains. (Buried at Covington, Indiana, and later removed to Lafayette, Indiana.)

*John Stowe Bobbs, M.D.*, who performed the first gall-stone operation in the world. (Buried at Crown Hill, Indianapolis.)

*Mrs. Z. (Mary E.) Burnworth*, who was Dr. J. S. Bobbs' patient. (Buried at McCordsville, Indiana.)

No definite plan has been made for memorializing these pioneers. A joint meeting of this committee, a like committee from the Indiana State Medical Association, members of the Bureau of Publicity, and officers of the Auxiliary was recently held. Suggestions were offered. A few members of our committee visited some of these graves. A pilgrimage to all of these graves will be made soon.

Interest and enthusiasm in our organization was manifested by the attendance of 20 members at our board meeting, in March. We have ten organized counties. A cooperative, friendly spirit was reported by each county. Two of our units arrange mid-summer picnic suppers with games, contests, and a general good time, for the Medical Society and Auxiliary. This serves as the link between the last spring and first fall meetings. A "white elephant sale" will be the means of increasing the treasury at one of these.

Another unit entertains its Medical Society with a dinner twice each year, at which time a general round table discussion is both enlightening and interesting.

# THE JOURNAL

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### THE RELATIONSHIP OF PRELIMINARY MEDICATION TO ANESTHESIA\*

JOHN S. LUNDY, M.D.†

Rochester, Minnesota

Those who administer anesthetics naturally want to make their work easier and to make anesthesia less unpleasant to the patient if they can. For these reasons, preliminary medication has been used for a great many years. Progress of the specialty of anesthesia, however, has made changes in the problem from time to time and it has become fairly complex, both because of a growing list of anesthetic agents and because of a growing list of medicaments that may be administered preliminary to anesthesia. From the standpoint of drugs, morphine probably should be considered first because of its very common and widespread use. Morphine is an analgesic and for that reason it is especially useful preliminary to the administration of a local anesthetic agent, preliminary to the administration of general anesthetic agents that are not very potent, and when the patient would come to the operating room suffering from pain as a result of his disease if morphine had not been used. Morphine has, however, certain effects which are not always desirable. Some people become markedly nauseated and vomit. A very few are stimulated and some become depressed. The point of special interest to the anesthetist is the depression of respiration which is to be observed after anesthesia has become established; in a few instances, if large doses of morphine are used, depression may occur after the first few inhalations of the anesthetic agent. In such circumstances, the cause of the narrowing of the pupil that may be observed probably will be the morphine.

The most common undesirable experience related to the use of morphine occurs when it has

been given hypodermically and its administration has been followed by ether administered by the open drop method. It is not uncommon for a patient's respiration to be so greatly depressed, or even inhibited, that more ether cannot be introduced into the lungs, and thereby into the blood stream, and relaxation cannot be produced. This situation may interfere with the operative procedure if relaxation is essential to the success of the operation. Morphine, I think, may well be avoided, therefore, as preliminary medication before ether anesthesia, except when oil and ether are given by the colonic method of Gwathmey. Then the success of the method depends on respiratory depression which minimizes exhalation of ether, with the resulting loss of anesthesia in proportion to the loss of ether. Use of morphine is desirable, also, in connection with anesthesia by means of a gas, whether the gas is nitrous oxide, ethylene, or cyclopropane.

When the use of morphine is desirable, and the patient has arrived in the operating room without having received a hypodermic injection, I prefer to give the morphine intravenously rather than subcutaneously so that the effect of the morphine will be at its highest before administration of the anesthetic agent is begun. Conditions may become unsatisfactory if absorption of the morphine and accumulation of the anesthetic agent in the blood stream occur unexpectedly in the middle of the operation, with resulting marked depression which may or may not be difficult to treat. In general, administration of morphine to small children is best avoided since the barbiturates, especially those of which the action is not prolonged, can be used with satisfaction.

Barbiturates that break down in the body and do not depend entirely on the kidney for elimination are preferred to such agents as barbital (veronal). A number of useful barbiturates have become favorites in different localities. My preference is for pentobarbital sodium or its isomer, sodium amytal. Of pentobarbital sodium, I like to give 1½ grain by mouth the night before operation to insure sleep for the patient, who may be

\* Read before the meeting of the Fort Wayne Medical Society, Fort Wayne, Indiana, April 21, 1936.

† Section on Anesthesia, The Mayo Clinic, Rochester, Minnesota.

spending his first night in the hospital and in a strange bed. To the average adult who is to undergo general surgery, 1½ grain is given on the morning of operation and this may be followed by a hypodermic injection of morphine, 1/6 grain, and of atropine, 1/150 grain, thirty or forty-five minutes before the anesthetic is to be administered. If the patient is a child, a barbiturate in a dose which is sufficient only to minimize the excitement, is given to advantage. The combination of drugs that has been mentioned has the advantage of exerting the analgesic and sedative effect of the morphine, and the hypnotic effect of the barbiturate, and the drying effect of the atropine. The atropine conserves moisture by minimizing perspiration and it aids breathing by keeping the throat and air passages relatively dry and free of mucus and excretions. If a local anesthetic is to be used, the antispasmodic action of the barbiturate protects the patient, to some extent, against the convulsive effect of the local anesthetic. Nitrous oxide is more easily used with such medication than without it. This is also true of ethylene and cyclopropane, for less of the agent need be used. Induction is quicker and postoperative rest is provided. On the whole, satisfaction of patient and physician is greater when such preliminary medication is used than when it is omitted. When ether is given by the open drop method, the volume of respiration having already been decreased by use of morphine and a barbiturate, and further diminished by the ether, relaxation may be interfered with to such an extent that it will be necessary to change to another method or agent. For instance, nitrous oxide, oxygen and ether may be administered by means of the gas machine, if, either from the tank or by rebreathing, some carbon dioxide is made available for stimulation of respiration.

When anesthetics for intravenous administration are employed, such as sodium n-methyl-cyclohexenyl methyl malonyl urea (evipal soluble) or sodium ethyl 1-methyl butyl thiobarbituric acid (pentothal sodium) less of the selected preparation need be given intravenously if preliminary medication is employed. Preliminary medication contributes to the successful use of these relatively mild and short-acting agents that are given intravenously if the operation lasts as long as thirty minutes. In such circumstances it may be desirable to combine a respiratory stimulant with the intravenously administered anesthetic agent, for example, such a respiratory stimulant as coramine. One part of the stimulant to four parts of the anesthetic may be employed, or some other proportion that is indicated under the given circumstances may be used.

The outstanding value of preliminary medication is emphasized in the use of what I have termed "balanced anesthesia," wherein the attempt is to administer small quantities of several agents rather than a large amount of one agent. For

example, a patient may be given a barbiturate, morphine and atropine before operation. The line of incision may be infiltrated with 0.5 per cent solution of procaine, combined with epinephrine greatly diluted (1:520,000). This may be followed by administration of a gas, nitrous oxide, ethylene or cyclopropane; then if relaxation still is not produced, ether in small quantities may be added to the gas and this seldom fails to bring the patient into a state satisfactory to the surgeon and the anesthetist. Methods of balanced anesthesia are especially applicable when Magill's large bore, soft rubber, intratracheal tube is used. The tube provides an unobstructed airway and permits of quiet pulmonary ventilation. Through it the anesthetic can be administered in whatever amounts may be required. Moreover, the anesthetist is relatively free from worry over respiratory depression for he may administer his anesthetic by means of artificial respiration and insufflation if he wishes to do so.

The use of avertin, by means of which anesthesia was attempted when the preparation was first introduced, has changed so that now avertin in amylene hydrate usually is employed to produce basal anesthesia only. For this reason, use of avertin falls into the category of preliminary medication. Using a solution of avertin by rectum, in doses of sixty to one hundred mg. per kilogram of body weight, the best results seem to be obtained when the enema is given while the patient is in the bedroom, although it may be given in the anesthetizing room of the surgical operating suite. If the smaller dose of sixty mg. is to be used, then a barbiturate, with or without morphine, may also be administered. When the larger dose is used, ninety to one hundred mg. per kilogram of body weight, then a barbiturate and morphine may well be omitted, for the effect of avertin is not lost or diminished when respiration is normal.

Many drugs for preliminary medication have been suggested, such as scopolamine, and of the older drugs, chloral hydrate and paraldehyde have been used. Scopolamine has proved satisfactory, especially in obstetrics if the dose has been properly gauged. Chloral hydrate is generally available and is a powerful agent that would be more widely used today if it had not been so greatly abused in the past. Paraldehyde is useful and, I think, is not used enough. Its hypnotic effect is not associated with marked depression. In obstetrics, use of barbiturates such as pentobarbital, during the period that the cervix is being dilated, followed by gas anesthesia at the time of delivery, has been more satisfactory, I think, than when morphine has been used alone or in combination with the barbiturate, at least so far as the new born baby's respirations are concerned.

Regardless of the drug used preliminary to anesthesia, the dose should be such that the effect is not marked enough to prohibit the patient from answering questions or standing erect.

## THE USE OF CONTINUOUS SUCTION IN SURGICAL TREATMENT

(A NEW APPARATUS FOR SUCTION SIPHONAGE)

F. B. RAMSEY, M.D.

W. D. LITTLE, M.D.

J. E. PILCHER, M.D.

Indianapolis

Continuous suction of various types has been used for some time in surgical treatment for relieving distention of hollow viscera, improving drainage, and keeping wounds free from irritating discharges and secretions.

Two years' experience with the apparatus described here has shown some special advantages and methods of application<sup>1</sup>.

### DESCRIPTION OF APPARATUS

The apparatus consists of a water pump or aspirator, together with a siphon receptacle and a mercury release valve bottle, as illustrated in Figure 1. The aspirator is connected by a non-collapsible rubber tube to the siphon receptacle and the mercury release valve is attached to the same tube by a side arm inserted at a convenient point. The intake tube of the siphon receptacle is connected to the duodenal tube or other tube according to the purpose for which it is intended.

The mercury release valve is the essential part of the system and serves to release the suction in case the tip of the duodenal tube or aspirating tube becomes adherent to the wall of the intubated viscera or wound. When the aspirated cavity becomes empty, the tip of the tube is very apt to adhere to its wall and to remain adherent by force of the suction. The tube thereby fails to remove fluid which accumulates later unless the negative pressure is released by action of the release valve. This is done automatically since air is admitted to the suction circuit through the intake tube of the mercury bottle whenever the negative pressure is greater than that represented by the depth to which the intake tube is introduced below the surface of the mercury. This tube is adjustable and a depth of between one-half and one centimeter is suitable to maintain adequate suction-siphonage for most purposes. The valve also serves as a safety valve, so that if the water pump creates too vigorous suction because of fluctuation of water flow, the amount of negative pressure transmitted to the aspirating tube is never greater than that equal to the column of mercury in the intake tube. Thus the valve not only limits the amount of negative pressure, but

also makes it possible for the suction-siphonage to be effective continuously.

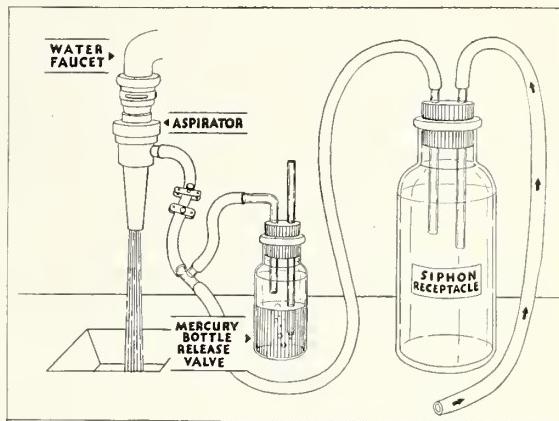


Fig. 1. The aspirator assembled with the mercury bottle release valve and siphon receptacle. (Two screw clamps were originally placed on the rubber tubing to control the suction. They may be omitted.)

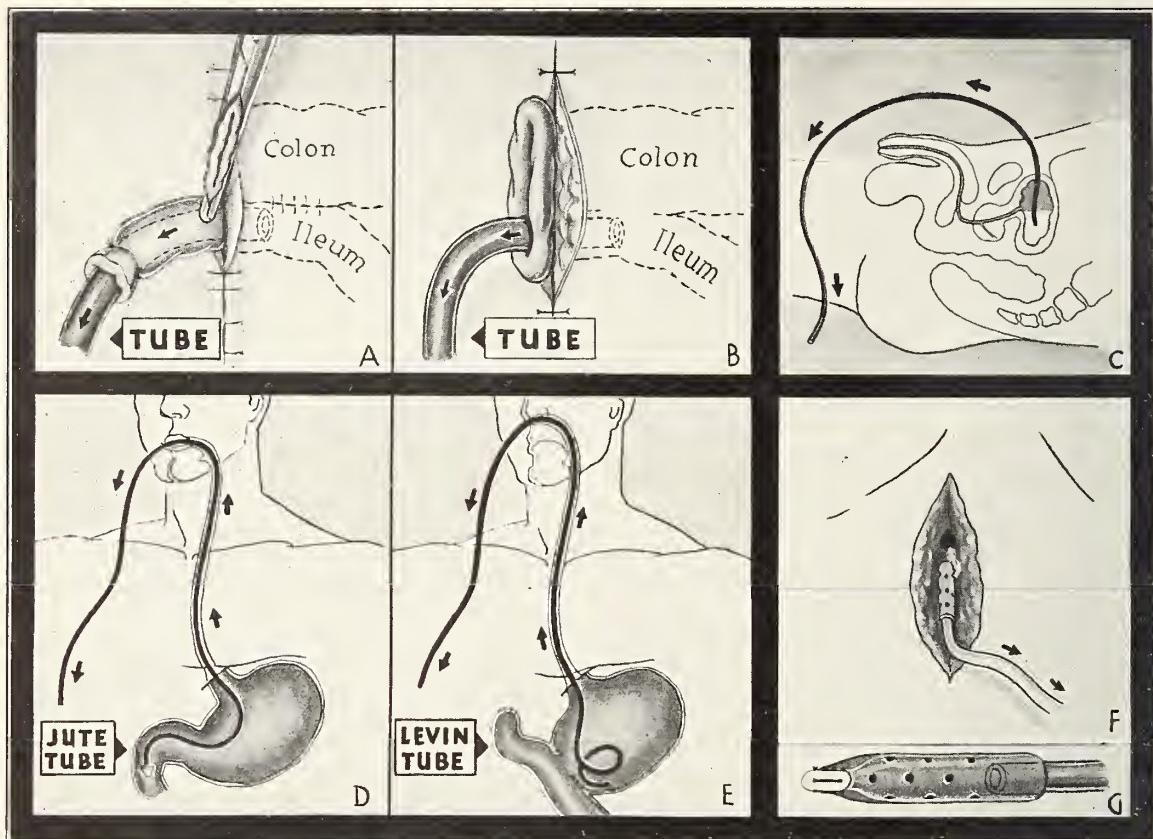
The pump itself (the Penberthy aspirator), is made with a universal rubber adapter and may be attached to almost any type of water faucet. We have found that a short length of Penrose tubing may be attached to the water outlet of the pump to serve as a silencer, so that the pump may be attached to the faucet of the lavatory in the patient's room. Only a moderate stream of water is necessary for the operation of the aspirator and the resulting sound has never been disturbing. The different portions of the rubber tubing may be of varying lengths. The siphon receptacle is usually placed on the floor at the patient's bedside and the release valve bottle may be fastened on the lavatory near the aspirating pump.

### MANAGEMENT OF APPARATUS

At times, due to a fall in water pressure, water may collect in the tube leading from the aspirator to the siphon receptacle, but if this tube is elevated so that it is above the level of the faucet when the apparatus is first set up, trouble from this source will be avoided.

Only occasional adjustments are necessary to insure efficient operation of the aspirator and mercury valve and we have found that its management is not troublesome. Plugging of the aspirating tube by bits of tissue or other solid material can be relieved by disconnecting the tube at intervals and irrigating the tube and cavity with water. The intervals between irrigations may be varied according to the type of fluid encountered. If any other source of negative pressure, such as a vacuum pipe line, is available the water aspirator may be eliminated and the mercury release valve may be made use of by attaching it to the tube connecting the siphon receptacle and the source of the vacuum. It is possible that in the

<sup>1</sup> Little, W. D., Ramsey, F. B., and Pilcher, J. E.: Apparatus for Suction-Siphonage, *J. Indiana M. A.*, 1934, XXVII, 344.



*Fig. II. A and B illustrate the installation of the aspirating tube in a Mickulicz type of enterostomy. C shows a sectional view of a suprapubic cystotomy with suction drainage. D and E are phantom diagrams of indwelling stomach and duodenal tubes. F and G show the special aspirating tube for continuous suction treatment of duodenal fistulae.*

(Illustrations by J. F. Glare)

future hospital rooms and wards will be equipped with air pressure and vacuum pipes, thus making continuous suction possible without the installation of special aspirators.

#### CONTINUOUS SUCTION WITH LEVINE AND DUODENAL TUBES

This type of aspirator is an excellent aid in the relief of distention of simple bowel obstruction as treated by the use of an indwelling duodenal tube described by Wangensteen.<sup>2</sup> (Figure 2-D.) It provides a convenient suction for keeping the stomach and duodenum free from accumulation of fluid and gas and has in our experience been more easily regulated than a set of siphon bottles. Besides being more positive in action, it has the advantage of collecting the aspirated fluid in a single bottle so that it may be measured.

Levine and duodenal tubes have become almost indispensable in the post-operative treatment of patients with paralytic ileus, gastric distention or bowel obstruction due to localized peritonitis or newly formed adhesions. We have used the aspirator with the duodenal tube in treating these con-

ditions and feel that it greatly increases the efficiency of such treatment. We believe that everyone using suction-siphonage in any form as a therapeutic measure for intestinal obstruction should constantly keep in mind the danger of continuing its use too long, especially in cases in which the distention is not quickly relieved. In those cases either with or without gangrene which demand operation, suction-siphonage may tend to delay the decision to institute operative measures and cause much harm.

As illustrated in Figure 2-E we have utilized the indwelling Levine tube as a method of decompressing the stomach after operative procedures on it. We have often been surprised at the large amount of fluid which may be removed during the first few days post-operatively. Such fluid if allowed to accumulate will distend the stomach and endanger the suture lines. By anchoring a Levine tube it is possible, with the aid of the aspirator, to keep the stomach empty at all times. This is not only a safety measure but also contributes to the comfort of the patient.

#### TREATMENT OF DUODENAL FISTULAE

This device was first assembled for the treatment of a duodenal fistula. We have also used it

<sup>2</sup> Wangensteen, O. H., and Paine, J. R.: Treatment of Acute Intestinal Obstruction by Suction with Duodenal Tube, *J. A. M. A.* 1933, CI, 1532-1539.

in the management of fistulae of the jejunum and ileum and have been gratified at its effectiveness. The best means of combating the digestive action of duodenal or jejunal fluid when it is being discharged into a healing wound is to neutralize the alkaline fluid by the continuous addition of an acid solution and to remove the fluid completely so that the wound is kept dry. We were able to render the duodenal juices inactive by a constant Murphy drip irrigation of N/20 hydrochloric acid and to remove all fluid from the wound by use of the aspirator. (Figure 2-F.) This succeeded in controlling the digestion of the wound to such an extent that the wound filled with normal granulation tissue and the surrounding skin was restored to normal.

It is of advantage to construct a special aspirating tip for this purpose to avoid plugging of the aspirating tube. A tube of wire screen, or a cuff of rubber tubing of approximately the same calibre as the outside diameter of the aspirating tube, is tied to the tube so that it projects past the end of the tube by about three inches. (Figure 2-G.) In case a cuff of rubber tubing is used, numerous perforations are cut in it and a tie is placed at its distal end. These devices hold the edges of the wound apart and allow continuous suction to be effective because they are not easily plugged by bits of tissue.

#### REMOVAL OF COPIOUS DISCHARGES

The same type of collecting tube may be employed in the care of any extensive wound from which the amount of discharge is so great as to necessitate frequent dressings. It is possible to maintain dry dressings on such wounds over a longer period of time by use of constant aspiration, thereby contributing much toward the comfort of the patient. Figure 2-C illustrates the installation of a small angle tube or a small catheter in a supra-pubic cystotomy wound so that the urine may be removed by suction. Aspiration, as provided by siphon bottles, will not, of course, be suitable for the care of open wounds, since a large amount of air is naturally admitted to the system, and therefore it is here that this type of negative pressure is necessary.

#### CARE OF ENTEROSTOMIES

Following resection of the right side of the colon we have recently anastomosed the terminal ileum and the transverse colon by the Mickulicz principle as described by Lahey.<sup>3</sup> In this operation the ends of the bowel to be anastomosed are implanted in the wound in the form of a double barrel enterostomy, the clamps being left on the bowel to prevent soiling. Later, when the wound has healed sufficiently to seal off the peritoneal cavity, the clamps are removed and the spur be-

tween the two segments of the bowel is cut by the application of a crushing clamp. This produces a common stoma for the two bowel ends and may be closed later without reopening the peritoneal cavity. This procedure has the advantage of being attended by a low mortality rate but it is troublesome to the patient since the contents of the ileum drain into the dressings for a considerable time and irritation of the surrounding skin results.

Figure 2-A illustrates how the ileum may be implanted so that it projects several inches farther than the segment of colon, making it possible to introduce a rubber tube into the ileum immediately after operation while the incision is protected by dressings. This step, originally described by Lahey, makes it possible to eliminate the element of obstruction during the first few post-operative days. By attaching the aspirator to this tube the drainage of the terminal ileum may be improved by suction. Later the staggered portion of ileum outside the abdominal wall will slough, as it has been separated from its blood supply at operation, and a large size catheter may be introduced into the ileostomy opening as shown in Figure 2-B. This may also be installed after the spur is cut. Continuous suction will remove most of the liquid contents of the ileum thus greatly facilitating the problem of dressings and the care of the skin. A continuous drip of normal salt solution introduced through a small catheter lying along the side of the aspirating tube aids by keeping the bowel contents as liquid as possible.

In addition to the above conditions other types of enterostomies may also be benefited by use of this type of apparatus. At times a poorly functioning Witzel tube will be more effectively managed by continuous gentle suction and decompression of obstructed loops of small bowel may be more quickly accomplished. Also MacGuire has recently mentioned the use of continuous suction as an aid in the care of Mickulicz anastomoses after resections of growths in the left colon.\*

#### ADVANTAGES

We have found that this device for suction-siphonage is dependable and positive in its action. It requires only a minimal amount of attention and adjustment. The amount of negative pressure may be regulated exactly by the mercury valve, and may be varied according to the requirements. It is applicable not only to the aspiration of closed cavities, but may be utilized also for the care of open cavities and wounds. It is not bulky and may be easily packed and stored when not in use. Due to its small bulk and adaptability it may be set up in the home if necessary.

#### SUMMARY

A device for the maintenance of continuous aspi-

<sup>3</sup> Lahey, F. H.: Resection of Right Colon and Anastomosis of Ileum to Transverse Colon After Mickulicz Plan, *Surg., Gynec. and Obst.*, 1932, LIV, 923-929.

\* MacGuire, D. P.: Carcinoma of the Colon, *Surg., Gynec. and Obst.*, 1934, LIX, 762-765.

ration is described. Its employment in the management of indwelling duodenal tubes, and its use in the care of enterostomies and troublesome fistulae is outlined.

The ease with which the aspirator may be assembled and the fact that it may be regulated with but a minimal amount of attention recommends its use in the handling of difficult surgical problems. We believe that many uses, in addition to those described for it, will be found in the future.

## CRANIOPAGUS MONSTER

J. B. ROGERS, M.D.

Michigan City

Much newspaper publicity was given concerning the birth of so-called Siamese twins, in Michigan City, on July sixth. The babies were not truly Siamese twins, but were more nearly of the craniopagus type of monster. The crown of one head was attached to the parietal portion of the other. This is a very rare form of duplication.



In my own practice of forty-one years, with more than 5,000 deliveries, I never have seen anything of this sort. The mother, Mrs. G., aged twenty-two years, had her last menstruation in November, 1935, and was nauseated almost from the time of conception. She was a very nervous girl and the nervousness continued into womanhood. In May of this year, albumen was discovered in the urine, and on June thirtieth, because of a steady increase in the albumen, she was taken to the Clinic Hospital and put to bed with strict dietary regulations. Her blood pressure never was more than 140.

The patient had an unusually enlarged abdomen, and fetal heart sounds were not discernible, but

twins were diagnosed from manual manipulation and the diagnosis was confirmed by roentgenogram which showed both heads presenting and overlapped.

On July 5, 1936, the patient had slight abdominal pains all through the day, but the pains did not increase in severity. Early in the morning of July 6 the pains increased and examination showed very little dilation, but a thinning of the os. The pains increased in severity and she was taken to the delivery room about 9:30 in the morning. Upon examination, the uterus was found to be fully dilated, and in manual exploration, the gloved finger came in contact with an ear. The pains increased in severity, but under ether anesthesia the patient suffered very little. Little progress was made in the advancement of the head until one drop of pituitrin was given every ten minutes. At about 11:15, what was supposed to be the head was allowed to come forth, and it was then that the other head was found to be attached. Under surgical anesthesia, the twins were delivered at 11:30. The presenting child lived only about fifteen minutes; the other one lived twenty-eight hours.

The mother is making an uneventful recovery; there was no episiotomy, and no laceration.

The parents consented to send the specimen to the museum of the Indiana University School of Medicine in Indianapolis where it is now.

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INDIANA STATE MEDICAL ASSO-  
CIATION WILL BE HELD

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**Page 389 or xxv**

## PERICARDITIS IN UREMIA\*

ARTHUR B. RICHTER, M.D.

Flora, Indiana

Acute fibrinous pericarditis occurs frequently in the terminal stage of chronic Bright's disease. Its diagnostic rub is one of the very few single signs in medicine which enables the physician to prognosticate with certainty the death of his patient within a few days or weeks. To be sure, its appearance may merely be added evidence that the end of a progressive and hopeless disease is near. However, it brings to the physician a satisfying definiteness to the situation.

In a study of glomerular nephritis<sup>1</sup> certain interesting features of the pericarditis of uremia were found. Some of these findings did not agree with the literature on this subject. These differences concern chiefly the incidence of acute pericarditis in uremia and its presence as a cause of certain electrocardiographic changes in this condition. The report which follows is a clinical and pathologic study of 42 cases of acute pericarditis in 127 necropsied cases of chronic Bright's disease.

The incidence of acute pericarditis in uremia as given in the literature varies from 4 to 14 per cent, with an average of about 10 per cent<sup>2,3</sup>. In this series, acute pericarditis occurred much more frequently, developing in 44.5 per cent of the 65 cases of chronic glomerular nephritis. Of the 55 patients who died of uremia resulting from vascular nephritis, nephrosclerosis, 23.6 per cent at necropsy showed acute fibrinous pericarditis, about half the incidence in the former group. One patient of five with congenital polycystic kidneys and one of the two patients with contracted kidneys due to pyelonephritis had acute pericarditis. For the entire series the total incidence of pericarditis in 127 necropsied cases was 33 per cent, more than twice the usual maximum given in the literature. The unusually high incidence in this series is difficult to explain. Possibly it is due to a special interest and search for this condition; however, every case had a well developed fibrinous pericarditis at necropsy. Although the present series is larger than that of most observers, a still larger series might reduce this frequency of pericarditis, but certainly not to the low figure given in the literature. In all probability other observers have included in their selection cases of chronic nephritis without clinically complete renal failure. This is suggested by the series reported by Barach<sup>2</sup> in which the average azotemia was considerably less

and the phthalein excretion a little more than in the present series. A comparison of the various features in the glomerular and vascular group fails to reveal the cause of the higher incidence of pericarditis in the former.

The tell-tale pericardial friction rub was noted in 21 of the 29 cases of glomerular nephritis with pericarditis, and in each of the two cases with pyelonephritis and polycystic kidneys. The diagnosis of pericarditis was thus made clinically in 73 per cent of the series. The rub was sometimes faint and transient, but more often loud, rasping, and prolonged. Usually heard over the entire precordium, when faint its maximum intensity was more often found along the left sternal border. The loud rubs usually persisted until the death of the patient. It is of considerable interest that this occurred later, as a rule, than in cases where the rub was faint or transient. We have yet to observe the complete recovery of a patient with uremic pericarditis. This has also been the experience of Fishberg<sup>3</sup>. However, Barach<sup>2</sup> observed a patient who lived for one year, and three others who lived from two to four months after the rub appeared. In his group of 26 cases, the average length of life after the appearance of the rub was 16 days, if the patient who lived one year is excluded. The average duration of the rub was eight days, the longest being two and one-half months. In the present series, the time from the appearance of the rub until death varied from a few hours to twenty-six days, averaging at least seven days. In some cases the rub was present on admission. The average duration of the rub was a little less. It disappeared transiently or completely in only five cases, although the intensity diminished in most instances.

Pericardial effusion was diagnosed clinically in one patient on the basis of marked enlargement of the area of cardiac dullness and diminution of the heart sounds. At necropsy 700 c. c. of pericardial fluid were removed. Although this patient did not have a rub, while under our observation, two others had rubs which persisted only slightly changed from 12 to 23 days, or until the day of autopsy when 700 c. c. of pericardial fluid were found in one case and 400 c. c. in the other. It is commonly believed that the disappearance of a rub is due to the accumulation of pericardial fluid. Since the fluid tends to collect in the lowest and posterior part of the pericardial sac, the rub may persist unchanged even when large amounts of fluid are present.

Except for a few moribund patients, the majority of the series had symptoms caused by their pericarditis during its early stage. The most frequent symptom was a peculiar fear or apprehension referable to the chest, which the patient could not well explain. It was not pain or pressure but an uneasy, frightening feeling in the chest. A real sense of oppression or distress in the precordium was very common; in at least six patients it be-

\* From work done in 1935 at the Medical Clinic of the Peter Bent Brigham Hospital, Boston, while assistant resident physician.

<sup>1</sup> Richter, A. B. and O'Hare, J. P.: The Heart in Chronic Glomerular Nephritis, *The New England Journal of Medicine*, 214:824, 1936.

<sup>2</sup> Barach, A. L.: Pericarditis in Chronic Nephritis, *Am. J. Med. Sc.*, 163:44, 1922.

<sup>3</sup> Fishberg, A. M.: Hypertension and Nephritis, Lea and Febiger, Philadelphia, 1934.

came a severe precordial pain. In two of these the character of the pain, the fall in blood pressure, the slight fever, leukocytosis, the precordial rub and even electrocardiographic changes so closely simulated coronary artery thrombosis that the true diagnosis became apparent only from the azotemia and the urinary abnormalities. An occasional patient experienced an increase in the dyspnea already present due to the myocardial weakness, nephritic toxemia, etc.

Following the onset of the rub, the temperature often rose one to two degrees, the leukocytosis, already present, remained the same, and the blood pressure did not fall until shortly before death.

Arrhythmias were more common during the pericarditis than before its development. Premature beats were noted in twelve cases, transient auricular fibrillation in three cases and auricular flutter in one. In nearly all instances, the hypertensive and often failing heart was already rapid, and it did not, as a rule, increase appreciably in rate after the appearance of the rub.

Alterations in the electrocardiogram in clinical and experimental pericarditis and in pericardial effusion have been well described by many writers. In several instances, however, the electrocardiographic changes in the pericarditis have been attributed to the associated cardiac disease. Wood and White<sup>4</sup> in a study of the electrocardiogram in uremia and severe chronic nephritis described positive deviations of the RS-T segment, as well as T wave negativity and abnormalities in rhythm and conduction. Although pericarditis was present in two of their cases when the abnormal electrocardiograms were taken, the authors concluded that the alterations in the electrocardiogram were due to the effects of the uremic toxins on the heart muscle.

In this series the cases which were followed over a number of months or years and in which periodic electrocardiograms were taken have been divided into three groups. One group includes the cases with pericarditis, another the cases with uremia (a blood urea nitrogen of 70 mgm. or more per 100 c.c.) but without pericarditis, and the last group includes the cases with a blood urea nitrogen below 70 mgm. per 100 c.c. Many cases over a long period of observation fall into more than one group. Prior to the onset of pericarditis only the electrocardiographic changes expected in hypertensive heart disease (left axis deviation, T-wave negativity and an occasional ectopic beat) occurred. When pericarditis appeared, delayed conduction and deviations of the RS-T segment were noted. Let us consider the 12 cases that had the most complete electrocardiographic studies during their pericarditis. These 12 had a total of 20 tracings. Digitalis effects may be excluded at once, because the drug had been omitted on account of nausea

or vomiting long before pericarditis had developed. The average blood urea nitrogen in these 12 cases was 190 mgm. per 100 c.c. Hypertensive heart disease was present in all but one case. In this patient with mitral stenosis auricular fibrillation did not appear until pericarditis developed. Two patients with normal tracings a few days prior to the onset of pericarditis showed with its development a positive deviation of the RS-T segment; in one case involving leads I and II and in the other all three leads. The T-waves were upright, resembling those described in the cases of Wood and White. One patient in addition to these abnormal ventricular complexes had transient auricular fibrillation and premature nodal beats. Of the remaining ten cases, two had transient auricular fibrillation and one had auricular flutter, all with normal tracings in the interim. Ectopic beats, nodal, auricular, or ventricular, occurred in six cases. A prolonged P-R interval was a transient occurrence in one case. T-wave negativity, present in only four cases, was not of any greater frequency during pericarditis than before its development. Q-waves were absent in the entire series. Two cases with pericardial effusion showed low voltage of the QRS complex in all leads.

Anterior chest lead studies, with the exploring electrode at the cardiac apex and the left sternal border, in the fourth inter-space, which were made with the conventional leads in five of the twelve cases were normal in four. The tracings of this one exception on two occasions showed absence of the Q-wave in the lead at the left sternal border; the Q-wave of the apical lead remained normal.

No attempt is made to discuss in detail the theoretical side of the underlying factors in the production of the electrocardiographic changes in pericarditis. This has been well done in a recent paper by Schwab and Herrmann.<sup>5</sup> Some factor other than the presence of a pericardial exudate must account for the occurrence of changes in the RS-T sector in only two of our cases. As compared to uremic pericarditis, the frequency of abnormalities of the RS-T segment in coronary artery thrombosis apparently uninfluenced by the presence or absence of pericarditis is significant. That the principal cause of such electrocardiographic changes in coronary artery occlusion is the myocardial infarction or ischemia seems to be well accepted. Schwab and Herrmann believe that ischemia of the myocardium produces deviations of the RS-T segment in the types of pericarditis unassociated with myocardial infarction. They believe that the ischemia of the heart muscle results from the interference of coronary blood flow by the elevated intrapericardial pressure of rapidly accumulating fluid. I do not present any other theory. However, one of our two cases with

<sup>4</sup> Wood, J. E. and White, P. D.: The Electrocardiogram in Uremia and Severe Chronic Nephritis with Nitrogen Retention, *Am. J. Med. Sc.*, 169:76, 1935.

<sup>5</sup> Schwab, E. B. and Herrmann, G.: Alterations of the Electrocardiogram in Diseases of the Pericardium, *Arch. Int. Med.*, 55:917, 1935.

the positive RS-T deviations did not have pericardial effusion. The abnormal tracing<sup>6</sup> was taken about twenty hours before death; at necropsy less than twenty c.c. of fluid were found in the pericardium. Histologic study of the myocardium in both of these cases failed to reveal significant pathologic changes. In five of the other ten patients pericardial effusion was present at necropsy, a few hours or days after the last electrocardiogram. Each showed arrhythmias but no significant abnormalities of the ventricular complex.

In the table is tabulated for comparison the essential laboratory data in the glomerular and vascular cases. These data which are strikingly similar in both groups do not even suggest an explanation for the incidence of acute pericarditis in the glomerular cases of almost twice that found in the cases of vascular nephritis. The only possible important difference is in the blood urea nitrogen, which averaged 50 mgm. per 100 c.c. more in the glomerular cases. However, little significance can be given to the average azotemia when one considers that in some cases of glomerular

nephritis the blood urea nitrogen was as low as in many cases of vascular nephritis.

In all of the cases the pericarditis was of the fibrinous type, and fresh adhesions were present in nearly all cases. The exudate was sufficient in amount to produce a "shaggy" or villous appearance in half of the series; in eight it was localized to large patches on both layers of the pericardium. The acute pericarditis in one patient was superimposed on a partially obliterative chronic fibrous pericarditis. Two patients who had lived twenty-eight to thirty-six days following the appearance of a pericardial rub had an almost completely adherent pericardium with moderately advanced organization of the process. In six cases there was practically no pericardial fluid. An effusion, more than 75 c.c., was present in eighteen cases; in thirteen the amount ranged from 150 to 700 c.c., averaging 330 c.c. These thirteen patients in whom cardiac failure was clinically present had in addition ascites or hydrothorax, or both. Heart failure is nearly always present in the chronic nephritic by the time uremic pericarditis has developed. However, in another study<sup>7</sup> hydropericardium was found in the cases with heart failure less frequently in the absence of pericarditis. This suggests the influence of both pericarditis and heart failure in causing a large excess of pericardial fluid in pericarditis of uremia. The opinion of Bright<sup>8</sup> that pericarditis is merely a part of a general tendency toward involvement of serous membranes, based on his observations that acute pleuritis and peritonitis often accompany pericarditis in uremia, has not been confirmed. In this series inflammation of the pleura could in each instance be attributed to pneumonia and peritonitis was absent.

The pericardial fluid in most cases was of a light amber color, usually clear or slightly turbid, containing flakes of fibrin. In three cases with large effusions, the fluid was hemorrhagic. A slightly purulent fluid resulting from secondary infection of the pericardium was present in one case.

Microscopically both layers of pericardium were hyperemic and edematous, usually containing a few lymphoid cells. This mononuclear infiltration in a rare instance extended into the myocardium where there was slight edema and degeneration of muscle fibers. A few mononuclear cells were seen occasionally in the fibrin network. In the two cases from which pyogenic organisms were obtained there was moderate infiltration of the fibrin and the pericardial tissue by polymorphonuclear cells. The pericardial exudate of so-called terminal pericarditis in nephritis, or in other diseases in which this condition occurs less frequently, is almost always sterile. It is not surprising that occasionally micro-organisms are isolated as a result of secondary invasion of the pericardium or

	29 Cases of Chronic Glomerular Nephritis	13 Cases of Nephrosclerosis
Age (years)		
Range	19-62	29-54
Average	35	44
Sex		
Male	17	9
Female	12	4
Blood Pressure		
Range	160-275 100-175	180-240 120-180
Average	190 120	230 140
Blood Urea Nitrogen mg. per 100 c.c.		
Range	85-291	55-211
Average	195	145
'Phthalein	less than 5% in 2 hours	less than 5% in 2 hours
Hemoglobin %		
Range	20-86	25-70
Average	50	51
R. B. C. (millions)		
Range	1.2-4.5	2.6-3.9
Average	2.7	3.0
Carbon Dioxide Combin-ing Power (VanSlyke)		
Volume %		
Range	15-46	25-44
Average	30	35
Incidence of Acute Pericarditis %	44.5	23.6

<sup>6</sup> Levine, S. A.: Coronary Thrombosis: Its Various Clinical Features. Medicine Monographs, Vol. 16 (See fig. 83, p. 90).

<sup>7</sup> Pyrah, L. N. and Pain, A. B.: Acute Pericarditis: A Review of 215 Autopsies, *Jour. Path. and Bact.*, 37:233, 1933.

<sup>8</sup> Bright, Richard: Guys Hospital Reports, 1:380, 1836. Elements of the Practice of Medicine, 1:322, 1839, London.

from a general or local bacterial invasion, so common in the terminal stage of various chronic diseases or immediately post mortem. The organisms most frequently encountered are the pneumococcus, the streptococcus and the colon bacillus. Of the forty-two cases, cultures of the pericardial exudate were sterile in all but two. In both instances the organisms, a streptococcus and a Gram-positive bacillus in one, and a Gram-negative bacillus in the other, were believed to be secondary invaders. In both cases, as in those reported by Barach with positive cultures, polynuclear cell infiltration of the pericardium was present histologically, and in one the pericardial fluid was even slightly purulent.

#### COMMENT ON PATHOGENESIS

Although terminal, pericarditis occurs in other chronic debilitating diseases such as carcinoma, etc.; its striking frequency in chronic nephritis with uremia is as yet unexplained. Toward an explanation of the cause and the pathogenesis of this condition there have been no significant contributions in the past few years, nor can any be added now.

There are two principal theories. Although the chemical theory has the greatest number of adherents, a few still believe that terminal or uremic pericarditis is due to an infection of low virulence. The pericardial exudate is nearly always sterile, but pyogenic organisms resulting from secondary invasion of the pericardium are occasionally recovered. Negative results have been reported by others from more complete bacteriological studies than by the methods employed in our own cases. These include animal injections of the pericardial fluid and aerobic and anaerobic cultures.

The chemical origin lacks almost as much in experimental and clinical support as does the bacterial. The experimental production of renal failure in animals has not been followed by pericardial inflammation. The French writers often have commented upon the importance of azotemia in uremic pericarditis. That other factors than nitrogen retention in the blood are essential in causing pericarditis is suggested by certain experimental studies resulting in the production of marked azotemia, as well as by the rare occurrence of pericarditis in the uremia of acute nephritis. In the latter condition the blood urea nitrogen may, in severe cases, be well over 150 mgm. per 100 c.c. Moreover, in terminal pericarditis occurring in other chronic debilitating diseases such as carcinoma, the blood urea nitrogen may be normal or only slightly elevated.

The combination of azotemia, anemia and acidosis is a probable factor in the greater frequency of this aseptic pericarditis in chronic nephritis than in other diseases. However, neither this combination of factors nor a variation in their degree seem a satisfactory explanation for the development of uremic pericarditis in some of these patients. This, together with the cause of the more

frequent occurrence of pericarditis in glomerular than in vascular nephritis, are problems worthy of more experimental study.

The author cannot support the theory that uremic pericarditis is secondary to a myocarditis.<sup>2</sup> In only an occasional case in this series were there slight degenerative changes in the myocardium. These were beneath the pericardium, evidently an extension of the pericardial process with mononuclear infiltration. Considering the possibility that arteriolar sclerosis of the pericardium might be an initiating factor as in some instances of uremic necroses of mucous membranes, the histologic sections of the pericardium have been reviewed from this viewpoint with negative results. Until significant primary, non-infectious, structural changes are demonstrated in the pericardium in terminal pericarditis, one cannot agree in the analogy, suggested by Barach, between the sterile acute fibrinous pericarditis associated with the necrosis of myocardial tissue in cardiac infarction and pericarditis in uremia.

#### SUMMARY AND CONCLUSIONS

Of 127 necropsied cases of chronic Bright's disease with clinically complete renal failure, forty-two, or thirty-three per cent, had acute fibrinous or serofibrinous pericarditis. In the sixty-six cases of chronic glomerular nephritis, forty-four per cent had acute pericarditis as compared to twenty-three per cent of the fifty-five cases of vascular nephritis. The average clinical and pathological incidence of pericarditis in severe, unclassified, chronic nephritis found in the literature is only about ten per cent. By an analysis of the various laboratory and other available data it was not possible to account for this discrepancy in the incidence of pericarditis in the two types of nephritis or between that of the entire series with the published experience of others. In the latter instance it is believed that a more strict limitation of the present series to cases with complete clinical renal failure than has been done in those previously reported is an important factor.

The various clinical features of uremic pericarditis are presented. The condition was diagnosed clinically in seventy-three per cent of the series. The average duration of life after the appearance of the pericardial rub was about seven days, the longest thirty-six days. Precordial pain was more common than generally believed and, along with other features, closely simulated coronary artery thrombosis in two cases. By following many of the cases of chronic nephritis over a long period, repeated electrocardiograms have shown that various arrhythmias, positive deviation of the RS-T sector and disturbances in conduction appear in greatest frequency following the development of pericarditis. This strongly suggests that these various electrocardiographic changes, previously attributed to the effects of uremic toxins on the

heart muscle by others, are really caused by the pericarditis. An accompanying pericardial effusion may be a factor in some cases.

The clinical and laboratory data and studies in the pathology and bacteriology of the cases have been presented, and the theories of the pathogenesis of uremic or terminal pericarditis discussed. Nothing new has been contributed to these various phases of a condition which deserves further experimental study.

## ADVICE TO INTERNS ENTERING PRACTICE\*

E. D. CLARK, M.D.

Indianapolis

It gives me great pleasure and happiness to join in congratulating you on the completion of your hospital internship and on your entry into the practice of medicine. In making medicine your life work, I am sure you will establish as high a standard of human relationships as you have achieved in your studies and training thus far.

You are not going to find your pathways always strewn with roses and you will not always find agreeable circumstances. There will be thorns and pitfalls, and I consider it only fair to you that we who have been over the road point out at least some of the most obvious danger spots. The chemistry of human nature is a study and philosophy all its own.

Of course, you desire success, professional and financial, and I hope that you achieve it promptly. But I warn you now that ultimately a higher type of success will come if you charge for your services in accordance with your patients' pocketbooks. A few, without conscience, fail to make that a practice. Your fees should be based on the real ability of the patient to pay. This is not only the gentlemanly procedure, but it will go farther than anything to stave off, or kill off, the evil of socialized medicine—that monster of socialism and communism that of late has had so much encouragement to rear its head from without our own professional ranks, as well as from self-seeking politicians and crack-brained "do-goods" and "uplifters." Careful consideration of your patients' financial resources will make you a real physician of the traditional and time-honored type, and will win good will for the profession, whereas, gouging and other sharp practices create new and larger numbers of knockers to wail and moan for socialized medicine and feeding at the public trough.

I can say bluntly and frankly that there is no more dangerous and insidious pitfall in your path than that of fee splitting. In opening these few remarks I saluted you as "gentlemen." I meant

just that, and I mean to say now that there never was a time when this profession needed gentlemen as it does today in the face of rackets (among them fee splitting), the "up-side-downness" of our times, and attempts at political control. Play it straight and sleep well at night.

There is a law of compensation that works for the real physician; witness the reverence and honor in which the old country doctor was and is held. The old country doctor did not have to beware of falling a victim to over specialization or many other complex and stultifying factors which you must face. I think perhaps I regret that all of you, as part of fitting yourselves for a real place in our profession, cannot have some of the experiences, the human relationships and the genuine pleasure which come out of the country doctor's practice. But at least you can set no higher goal for your career as a physician than to try by your acts to bring yourselves that trust, respect and confidence which the country doctor earned by devotion to his job.

Good luck!

## Convention Bill

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October 6, 7, and 8

\* Address presented at the Methodist Hospital, Indianapolis, June 30, 1936, at the time of presentation of diplomas to outgoing interns.

## THE BIO-ASSAY OF A FIBRO-ADENOMA OF THE BREAST FOR ESTROGENIC SUBSTANCE\*

MAURICE V. KAHLER, M.D.  
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The physiological changes induced in the mammary gland by the estrogenic hormones were discussed recently by Edgar Allen.<sup>1</sup> The possibility that certain pathological lesions of the breasts are caused by the estrogenic hormones under abnormal conditions has been suggested by Lewis and Geschickter.<sup>2 3 4</sup> They report a high yield of "oestrin" obtained from a fibro-adenoma removed from the breast of a colored girl, age twelve. These reports interested us since we had been working for some time with the estrus inducing principles obtained from the blood and urine of pregnant and non-pregnant women and from placentas.

The following are case reports of a fibro-adenoma and a normal breast for control. The bio-assay of the tumor and normal breast for estrogenic content are reported for comparison. The experiments were further controlled by assay of hog ovaries.

### CASE REPORTS

Case 1—Miss Lavina W., a white girl, age fifteen, noticed a lump in her right breast October 5, 1934. She was admitted to the James Whitcomb Riley Hospital. She gave a history of the usual childhood diseases with good recovery. Pubic and axillary hair appeared at eleven years of age. Her first menstrual period occurred at twelve years of age. Her periods continued regularly at twenty-eight-day intervals with flow lasting seven days. Flow was considered normal in quantity. Her last period began October 1, 1934. Her father died of cancer of the stomach and a maternal aunt died of cancer of the breast. She weighed 153 pounds and physical examination was negative except for the presence of a freely movable, non-painful lump the size of a small orange in her right breast. The skin over the tumor was not dimpled and the nipple was not retracted. A diagnosis of fibro-adenoma was made and the tumor was removed October 20, 1934. Thirty grams of the tumor were extracted with benzine, which on bio-assay yielded

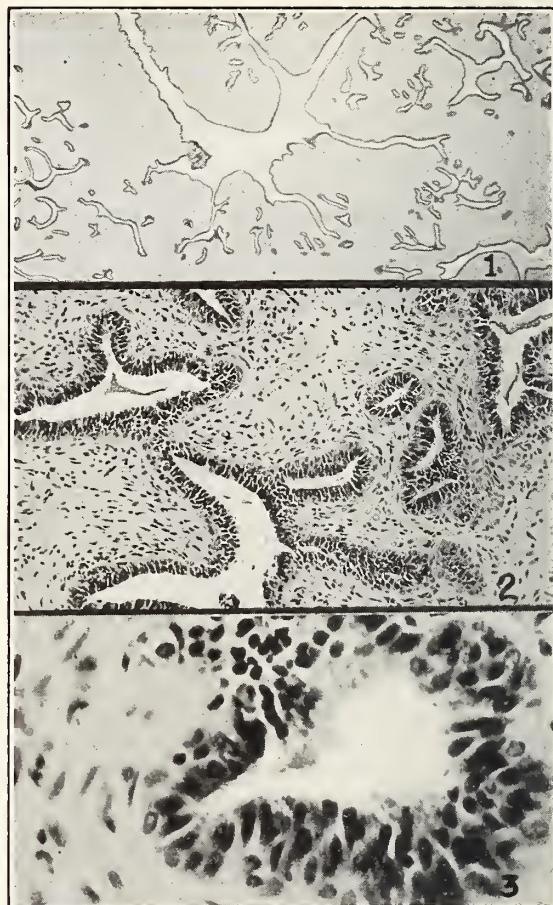


Fig. 1. (1) Low, (2) Intermediate, (3) High magnification of fibroadenoma of breast.

plus eleven Allen-Doisy rat units of estrogenic principle per gram of tissue.

Case 2—Mildred H., a colored girl, age fifteen, weight ninety-five pounds, was admitted to the Indianapolis City Hospital January 11, 1935, with a diagnosis of acute appendicitis. A laparotomy was performed on the day of admission and the appendix was removed. It was retrocecal, markedly inflamed, and friable, with considerable peritonitis present. Her temperature and pulse became normal in one week and progress was satisfactory the following ten days. At this time, however, she developed abdominal distention, a rise in temperature and pulse, and died February 12, 1935, of general peritonitis and bowel obstruction. We were unable to obtain a complete history in this case; however, the records show that she had been a healthy girl with a menstrual history which presented no abnormal features. Her last period occurred January 31, 1935. It is unknown if she menstruated during the time of her last illness. One hundred grams of breast tissue were extracted with benzine and chloroform. On bio-assay the chloroform extract yielded minus one Allen-Doisy rat unit of estrogenic principle per gram of tissue. (The chloroform extract of twenty-four

\* From the Research Division, Indiana University School of Medicine.

<sup>1</sup> Allen, Edgar: The Physiology of Estrogenic Principles. *J. A. M. A.* 104:1498, 1935.

<sup>2</sup> Lewis, Dean, and Geschickter, Chas. F.: Estrin in High Concentration Yielded by a Fibro-Adenoma of the Breast. *J. A. M. A.* 103:1212, 1934.

<sup>3</sup> Lewis, Dean, and Geschickter, Chas. F.: Ovarian Hormones in Relation to Chronic Cystic Mastitis. *American Journal of Surgery.* 24:280, 1934.

<sup>4</sup> Geschickter, Chas. F., Lewis, Dean, and Hartman, Carl G.: Tumors of the Breast Related to the Oestrin Hormone. *American Journal of Cancer.* 21:828, 1934.

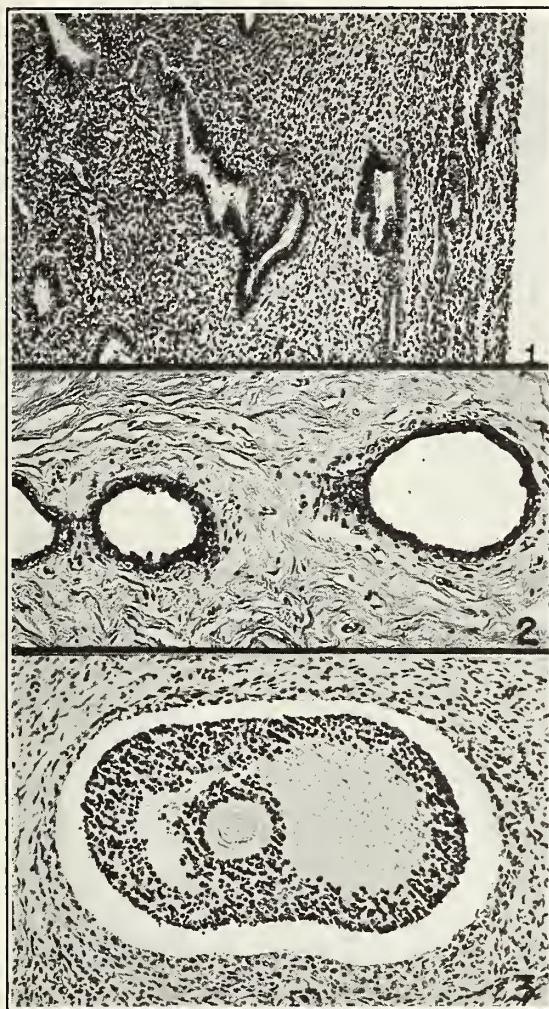


Fig. II. Low power photomicrographs. (1) Endometrium, (2) Breast tissue, (3) Ovary.

grams of tissue when injected into a group of twenty rats induced estrus in 90 per cent.)

#### CONTROL

Five hundred grams of hog ovaries obtained from a slaughter house were extracted with both benzine and chloroform. The chloroform extract yielded one Allen-Doisy rat unit of estrogenic principle per eight grams of tissue. This yield is the same as that cited in the report of Lewis and Geschickter.<sup>2</sup>

#### METHOD OF EXTRACTION AND BIO-ASSAY

The tissue was macerated with a meat grinder, autoclaved at fifteen pounds pressure for thirty minutes, placed in a flask with reflux condenser, and boiled with six times its volume of benzine or chloroform for one hour. The solvent was poured off, fresh solvent added, and boiling continued for another hour. This was repeated the third time. The three volumes of solvent were

combined and evaporated to dryness. The residue was taken up in thirty cc. of olive oil and injected into twenty castrated female rats. Each rat received one-half cc. of olive oil subcutaneously in the morning and evening of the first day and in the morning of the second day. Vaginal spreads were made morning, noon, and evening for two days beginning forty-eight hours after the first injection. Spreads were interpreted as proposed by Kahnt and Doisy.<sup>5</sup> None of our extracts were toxic to the rats.

With our early extractions we used benzine, following roughly the method described by Laquer, Hart and de Jongh,<sup>6</sup> in extracting the estrogenic hormone from placenta. We later extracted equal portions of tissue separately with benzine and commercial chloroform. The chloroform extractions in most instances gave a slightly higher yield of the estrogenic principle than the benzine extractions. For this reason, and to avoid the danger of an explosion, we prefer chloroform to benzine as a solvent.

#### SUMMARY

Bio-assay of a fibro-adenoma removed from the breast of a young girl gave a yield of plus eleven rat units of estrogenic principle per gram of tissue. Bio-assay of post-mortem breast tissue of a girl the same age gave a yield of minus one rat unit per gram of tissue. (On two occasions we have assayed uninvolved breast tissue of older women obtained in the operating room and in each instance only traces of estrogenic principle were found.)

Apparently then there occurs a marked concentration of estrogenic principle in fibro-adenomas of the breast. We are aware that the presence of an excess of estrogenic principle in a fibro-adenoma of the breast does not furnish conclusive evidence that the tumor is caused by a prolonged or excessive stimulation of normal breast tissue by the estrogenic hormones.

A simple method for the extraction of the estrogenic principle from certain tissues has been presented.

2611½ W. MICHIGAN ST.

<sup>5</sup> Kahnt, L. C., and Doisy, E. A.: The Vaginal Smear Method of Assay of the Ovarian Hormone. *Endocrinology*. 12:760, 1928.

<sup>6</sup> Laquer, E., Hart, P. C., de Jongh, S. E.: A Note on the Preparation and Properties of a Female Sexual Hormone. *Lancet*. 1:1126, 1927.

## LEUKORRHEA

H. D. TRIPP, M.D.  
Logansport

Leukorrhea is probably one of the oldest symptoms known in medicine. The condition was not unknown to the ancient Chinese. Reference to it can be found in the "Na King," or "Principles of Medicine and Surgery," a work attributed to Huang Ti, 2736 B. C.<sup>1</sup>

It is impossible in the space allotted to present an exhaustive treatise on leukorrhea; however, some of the more common causes of leukorrhea will be discussed together with the more or less accepted treatments of the various types of leukorrhea.

Most authorities agree that the cervix is the source of practically all leukorrhea. The portio vaginalis is that portion of the uterus that is covered by vaginal epithelium. The walls of the structure are made up of smooth muscle and fibrous stroma. Instead of being lined with epithelium, the cervical canal is lined with endothelium of the columnar type. Deep infoldings of this endothelium into the walls of the cervix are known as glandular structures. They are not in a sense the same as discrete glands comparable to lymph glands, but because they have numerous ramifications and are capable of producing mucus, they are secretory and therefore are called glands.

This knowledge concerning the anatomy of the cervix is essential to an understanding of disease of the cervix because disease of the cervix invariably begins in the epithelium or endothelium. It is from these glands in the cervical canal that mucus is produced. The normal reaction of the mucus produced is alkaline and it is crystal clear. It only becomes white in appearance after it comes in contact with the vaginal secretion which is acid.<sup>2</sup> Excessive amounts of this secretion are known as leukorrhea. Pus and bacteria may or may not be present in varying amounts. Any trauma of the cervical glands acts as a stimulus for secretion whether it be from infection, laceration, contusion, congestion, or by irritation of the sympathetic nervous system. Continued stimulation causes hypertrophy and with hypertrophy comes excessive secretion. This overfunction often continues long after an initial stimulation or infection has subsided. Long after gonococci have disappeared, one may still find streptococci in a cervix which appears unhealthy. This is more particularly true of lacerated cervices. We have all come to appreciate the fact that gonorrhea is the cause of 45% of all cervical infection. Reliable statistics from good clinics will bear this out,<sup>1</sup> yet not everyone stops to recall that the initial infection may have

subsided many years ago and that secondary invaders have taken up the field already prepared by the gonococcus, and that there are other infections that may cause a leukorrhea such as tuberculosis, which is usually but not always secondary to tuberculosis elsewhere in the body. Chancre of the cervix will not cause the profuse leukorrhea that endocervicitis does, yet in every lesion of the cervix we must keep in mind the possibility of a primary lesion as well as secondary and tertiary ones. Erosions and more often ectropion by reason of their irritation through low grade infection cause an increase of cervical secretion.

Actinomycosis, rodent ulcer, and granuloma inguinale are mentioned as causes but are not common. More common are polypi and other neoplasms within the cervical canal, also stricture and foreign bodies such as stem pessaries.

Carcinoma is so seldom seen in the early stage that one cannot say that the watery discharge, supposed to be the forerunner of the bleeding, is characteristic. With the cervix being the most common site of carcinoma in women, it behooves physicians to be on the lookout for it, as many permanent cures are reported now from the use of radium. The appearance of the lesion does not always indicate the stage of malignancy of the growth, and it is very gratifying to see the good results that are being obtained in cases that from first appearance seem to be far advanced.

Treatment of cervical leukorrhea which is due to endocervicitis ectropion, or laceration, has for its basis the eradication of the source of irritation, and second, to replace the secreting endothelium with a non-secreting epithelium. This may be accomplished by several different methods, either by the use of silver nitrate stick, actual cautery, or by electrocoagulation. The Sturmidorf operation properly performed accomplishes the work very satisfactorily in a high percentage of cases. Lacerated cervices with an accompanied endocervicitis require a Schroeder operation. Amputation of the cervix is hardly justified for the treatment of endocervicitis. It is a rather difficult operation, and not infrequently is accompanied by severe post-operative bleeding. Mild chemical cauterization is not very effective treatment and must be repeated frequently, and in the end the patient still has her leukorrhea. Polypi and other neoplasms require surgical removal. Dilatation of the cervical canal is quite frequently necessary to rule out the presence of polypi. If this is necessary you then have adequate room to completely cauterize the cervix, any existing stricture is thus taken care of, and also it allows for freer drainage.

The body of the uterus as a source of leukorrhea is rather unusual. The only time that there is any secretion from the uterus is just before and just after menstruation. This is a watery discharge and does not assume the role that cervical secretion does in the production of leukorrhea. Since infection is so often the cause of increased

<sup>1</sup> Woo, A. W.: A Study of Three Hundred Cases of Leukorrhea. *Nat. M. J. China*, Shanghai, 1923-24, X, 127-144.

<sup>2</sup> Bland, P. B.: Leukorrhea, Its Significance and Treatment. *South. M. J.*, 1932, xxv, 17.

secretory action of endothelium, one would naturally blame the endometrium for excessive secretion because of the larger surface area. The work of Arthur Curtis, where he took the currettings of many uteri, ground them up and injected an emulsion of this into animals and was unable to produce infection, shows conclusively that the endometrium does not ordinarily harbor infection. In puerperal sepsis, however, this does not hold true.<sup>3</sup> Endometritis as a cause of leukorrhea is hardly to be considered, since the condition itself is so uncommon. Many men still curette the uterus for this condition which actually rarely exists. Everyone should be familiar with the work of Kelly's clinic at Johns Hopkins. In a histologic study of endometria from 800 pathologic cases in that clinic, Cullen was unable to find evidence of endometritis except in forty-nine. Similar evidence from histologic study has been obtained by Charles Norris.

Uterine polypi, adenomyomata, and submucous fibroids or degenerating fibroids are, of course, real causes of uterine discharge. Another condition that causes leukorrhea is hydrorrhoea gravidarum. Nothing can be done about this until delivery and the condition clears up by itself.

Neoplasms that are radio-sensitive had better be treated with radium; the others require surgery. Intra-uterine irrigations are certainly a thing of the past as a treatment for any condition. In summing up the uterus as a cause of leukorrhea, and in considering its treatment, it is very seldom necessary to condemn the whole organ and to subject the patient to a hysterectomy. There are cases of prolapse with the attending pelvic congestion that nothing else will help except a hysterectomy. Even this will sometimes fail to effect a cure.

Diseases of the adnexa are not usually considered as direct causes of leukorrhea. Salpingitis cannot truthfully be considered a cause unless one is dealing with a tuberculous process and here we must consider the cervicitis as a secondary manifestation of the disease. Some may argue that by way of dependent drainage the pus of a gonorrhreal tube travels through the uterus and into the vagina. Such a belief is absurd when we consider the anatomy of the tube and the pathology of salpingitis. We know that the lumen of the tubes usually becomes sealed and also that the cilia disappear so that it is impossible for pus to travel by this route. Retrograde lymph drainage is, however, more feasible. When there is salpingitis associated with leukorrhea it is more logical to believe that the cervix is oversecreting from insult sustained at the time of the first infection.

Ovarian and broad ligament tumors cannot be logically classed as causes of leukorrhea unless they are such as would cause increased pelvic congestion. Peri-uterine disease and chronic adnexitis

by way of the increased pelvic congestion may be responsible for leukorrhea. Cases of this type after a period of six months or a year following the initial infection respond best to the so-called house cleaning of the pelvis.

Malpositions and prolapse of the uterus may also be causes of hypersecretion of the cervical glands. Correction of the condition may or may not clear up the leukorrhea.

The vagina, being an epithelial lined organ, normally produces a slight amount of secretion, only enough to prevent drying of the mucosa. In irritations and inflammations of the vagina there is an excessive secretion just as there is weeping of the skin with irritations and inflammations. Infections, chemicals and trauma from foreign bodies may be the exciting factor in the production of vaginal leukorrhea. On the other hand there may be no real cause found locally. Of the infections gonorrhea seems to be the most frequent cause although the vaginitis that is produced is only transient except in children. Treatment in adults, therefore, after the acute stage, is centered more upon the structures that are endothelial lined, as the gonococcus finds these structures to be a better rendezvous. The cervix as well as Skene's ducts and Bartholin's glands require treatment with antiseptics. Injection of the last named structures with five per cent silver nitrate frequently may be all that is necessary. Excision of Bartholin's glands and incision of Skene's ducts may have to be resorted to before a cure is effected. Vaccines are not specific but are a valuable adjunct to local treatments. Strictly speaking, gonorrhea is a disease that is cured by antibodies and not by the doctor.

The trichomonas vaginalis is a parasite found in the presence of some severe cases of vaginitis; its role in the production of the vaginitis is a disputed question. At any rate a very profuse irritating discharge is present and treatment of the condition with the idea of killing off these invaders is the accepted method today. Many antiseptics have been recommended for this. Most of them are dyes that are believed to be effective for their penetrating power. Cleansing the vaginal mucosa thoroughly and frequently with tincture of green soap seems to be as effective as any of the ordinary remedies. In 1933 Gellhorn announced that he had found in Stovarsol the ideal remedy for this disease. Since then there have been many preparations advocated but as yet no specific has been found.<sup>4</sup>

Recently Huffman reported a series of fourteen cases treated with vioform suspended in glycerine to make a 6.66 per cent solution. He claims to have no recurrences and that the disappearance of the trichomonads is rapid and permanent. The

<sup>3</sup> Curtis, A. H.: Remarks on Leukorrhea. *Surg. Clinics, Chicago*, 1917, i, 777.

<sup>4</sup> Gellhorn, G.: The Treatment of Trichomonas Vaginalis Vaginitis with Acetarsone (Stovarsol), *J. A. M. A.*, 100, 1765-66, 1933.

symptoms subside shortly after treatment has begun.<sup>6</sup> Since the publication of his article I have had occasion to use the treatment in one case and the result in this case has been as good as he reports.

Monilia infection of the vagina is a rather uncommon cause of leukorrhea though it produces a profuse discharge and the mucosa of the vagina and of the portio show white plaques just as the same infection does in the condition known as thrush in the newborn. Treatment of this infection is simple: the application of 1-2 per cent gentian violet to every surface of the vagina for a period of a week on alternate days is almost a specific.

Functional leukorrhreas are those cases of leukorrhea which have no apparent basis, and which appear to be due to some constitutional condition, such as cardiac decompensation, pulmonary tuberculosis, diabetes, nephritis and a general debility from worry, overwork or any form of stress and strain. We often classify these individuals as psychasthenic or neurasthenic individuals. Improvement of their general health often will help them and as they improve in general health their leukorrhea will disappear. Tablets of iron arsenic and strychnine give about as good results as any other form of tonic. Since the vagina is derived from the epidermis and considered an appendage of the skin one would naturally expect it to be benefited by arsenic the same as other portions of the skin. The general tonic effect of arsenic as shown by Fantus is also desirable in these cases. The good effect that vitamin A has been shown to have on mucous membranes seems now to be generally accepted. Its use in leukorrhea of any cause would seem to be indicated. Also vitamin D would seem to be valuable as an adjunct to the iron arsenic and strychnine therapy for increasing general resistance. A high carbohydrate diet seems in order inasmuch as it is known that glycogen seems to be necessary in the walls of the vagina in order that the acid producing organisms require glycogen for their growth. Various monosaccharides have been used by placing these sugars directly into the vagina, and expecting to promote the growth of these purifying organisms. This, of course, will encourage their growth but it is only temporary. It seems more logical to feed the patient carbohydrates by mouth so that glycogen can be stored in the tissues including the vagina.

This depletion of vaginal glycogen may permit the growth of organisms that are not welcome and lead to unhealthy conditions of the vagina. Some speculation on the reason for this depletion may be permissible. In the particular type of leukorrhea at hand we notice that the incidence is greater in women of a high strung type, who seem to be under stress and strain continually. They are fearful and anxious, and many of them could be classed

as neurotics of one type or another. Now we know that during fright and fear there is an increase of adrenalin secreted, which in turn causes the liberation of glycogen from the tissues. This physiological fact is sometimes made use of in treating insulin shock, for an injection of adrenalin will liberate enough glycogen to raise the blood sugar level appreciably. This thought may be applied to cases that are hyperexcitable to explain why their tissues become depleted of glycogen; therefore, since sugars and starches are stored in the body as glycogen it seems better to attempt to replace the vaginal glycogen by feeding it per mouth than per vaginum.

Douching in the treatment of leukorrhreas is not a rational form of treatment and all that it accomplishes is to act as a cleansing agent. The patient who consults her doctor about a leukorrhea has probably tried several douches, and may perhaps have a worse leukorrhea than before she started using the douche. These patients are entitled to know the cause of their leukorrhea if they are expected to pay a professional fee.

After a complete history and physical examination the physician should endeavor to locate the cause of a leukorrhea. Make a bimanual examination, follow this by inserting a speculum, and with the aid of a good light inspect the cervix and if you do not find the cause there and you are sure the patient is not pregnant, dilate the cervix enough to explore the interior of the canal with a probe to exclude the presence of polypi and other neoplasms. Inspect the vaginal mucosa, and before removing the speculum take a drop of the secretion and examine it for monilia and for trichomonads. The second smear should be stained with Gram's stain for the identification of gonococci. Smears should also be made from the urethra and from Skene's ducts and examined for gonococci. All the other organisms found in the vagina need not cause any worry for the work of Curtis, I believe, shows conclusively that the most of them are harmless anaerobes.<sup>7</sup>

#### CONCLUSIONS

1. Cervical leukorrhea is by far the most common of leukorrhreas.
2. Cervical leukorrhea is best treated by treating the endocervicitis.
3. Cauterization of the endocervix (with silver nitrate stick, actual cautery, or by electrocoagulation) is the method of choice in treating endocervicitis.
4. The Sturmdorf operation is the best operative procedure for cystic cervices that are also the seat of endocervicitis and are not lacerated; the Schroeder operation is the operation of choice for those cervices that are lacerated and also the seat of endocervicitis.

<sup>6</sup> Huffman, J. W.: Trichomonas Vaginalis Vaginitis, *Am. Jour. Surg.*, XXX, 312-313, Nov., 1935.

<sup>7</sup> Curtis, A. H.: On the Etiology and Bacteriology of Leukorrhea. *Surg. Gynec. & Obst.*, 1914, xix, 25.

(Continued on Page 398)

## WATER METABOLISM\*

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Water is the principal constituent of the body, comprising seventy per cent of the body weight. It is second only in importance to oxygen for the maintenance of the life and activity of every cell. It is importantly concerned with the excretion of waste products and the dissipation of heat. In health a fixed amount of water is held by the body and the excess is excreted. The sudden loss of ten per cent of the water of the body results in serious disorders and the loss of from twenty to twenty-two per cent results in death.

Normally water enters the system only through the mouth. The two chief sources of water to the organism are, first, the water of food and, second, the water that is drunk. The two other sources of water are of minor importance and for practical purposes can be disregarded. They are the water formed by the oxidation of the hydrogen of the foodstuffs and the body-tissue water that is set free when tissue is oxidized. Solid food averages about eighty per cent in water content and is therefore a real but varying percentage of the total water intake. The regular hospital diet will yield about 1000 c.c. of water a day and the soft diet about 500 c.c. The average daily amount of fluids drunk by the adult is generally estimated at about 2000 c.c.

The three sources of water excretion involved in the normal maintenance of water balance are: first, the insensible water; second, the water of the stools; and third, the water of the urine. The continuous insensible loss of water by vaporization from the skin and lungs under normal conditions will average from 900 to 1400 c.c. daily for the adult at normal activity. Greater activity or high environmental temperature in the normal individual and fever or hyperthyroidism in the sick patient will increase this insensible loss. The daily water loss in the feces of a normal individual is generally not more than 200 c.c. The remainder of the excess water ingested is excreted by the kidneys in the urine, the amount of which varies rather widely depending upon the quantity lost through the other avenues of excretion. The studies of Newburgh and Lashmet<sup>1</sup> have shown that the body will use its water to remove heat by evaporation from the skin in its attempt to maintain constant normal body temperature at the expense of water going to the kidneys. In other words, the water of insensible loss has preferential rights over the water of the urine, and

the insensible vaporization from the lungs and skin continues even when complete anuria and dehydration exist.

The normal individual excretes about thirty-five grams of solid waste daily by way of the kidney. With the normal kidney working at maximum concentration, about fifteen grams of water are required to carry each gram of solids. Thus it would take a minimum of about 500 c.c. of highly concentrated urine of a specific gravity of 1.030 to excrete this thirty-five grams of waste. If less than this amount of water is available for excretion by the kidneys, retention of nitrogenous and other waste material must occur. If the function of the kidneys is impaired, there is an inability to concentrate the urine. In this case as high as forty grams of water may be necessary to carry each gram of solids, and a daily output of 1500 c.c. of urine of a specific gravity of about 1.015 would be required to prevent retention of wastes in the body.

In certain illnesses excessive sweating, vomiting, and diarrhea further increase the water loss above the normal. Coller and Maddock<sup>2,3</sup> have called attention to the importance of considering the excessive water losses in surgical patients where hemorrhage, vomiting, diarrhea, drainage from intestinal and biliary fistulas or massive exudations from inflammatory surfaces, such as burns, may carry away large amounts of fluid. They emphasize the loss of water from sweating in the operating room and during the period of immediate recovery. With the water loss in the surgical cases there is also important loss of minerals from the body fluids—chiefly of the sodium and of the chloride ions.

For the normal adult in health, then, the minimal daily water requirement will be upward of 1500 c.c. In the sick patient, in the surgical case, and in the individual with poor kidney function, this minimal requirement will be greatly increased due to the factors enumerated above. What happens if the individual's total intake of fluid is not sufficient for his daily water losses? We have indicated above that the loss by evaporation from the skin and lungs continues even though the water left over for the formation of urine is inadequate to prevent retention of wastes, or even in the presence of anuria. The degree of waste retention in such case is, however, mitigated through a limited contribution of water by the body itself. As this continues a depletion of body fluids as well as important minerals occurs with the well known symptoms of dehydration. The results of dehydration may be far reaching in the more extreme case. There is a disturbance of the heat regulating mechanism, an increase of the viscosity of the blood, a decrease in the oxygen carrying capacity

\* Presented before the Clinico-Pathological Conference, Indiana University School of Medicine, and the Marion County Medical Society.

<sup>1</sup> Newburgh, L. H., and Lashmet, F. H.: *Am. J. M. Sc.*, 186:461 (Oct.), 1933.

<sup>2</sup> Coller, F. A., and Maddock, W. G.: Dehydration Attendant on Surgical Operations, *J. A. M. A.*, 99:875 (Sept. 10), 1932.

<sup>3</sup> Coller, F. A.: Water Balance in Surgical Patients, *Neb. State Med. Jour.*, 20:361 (Oct.), 1935.

of the blood, a decrease in the kidney function, and a disturbance of the acid-base balance.

In health and in the fully conscious individual thirst is a fairly delicate indicator of the water needs of the body. In the seriously sick and particularly in the unconscious patient the responsibility rests with the physician and nurses of assuring the individual a sufficient intake of fluids. The most rational method of doing this is by the attempt to secure the elimination of a sufficient quantity of urine. If the concentrating power of the kidney is known, it may be assumed that the body will have an adequate supply of water if the specific gravity of the urine is kept definitely below the maximum concentration that is possible. Otherwise in all cases of serious illness one should aim at the excretion of at least 1000 c.c. of urine in twenty-four hours and if impairment of renal function exists, the minimum excretion should be 1500 c.c. When the quantity of urine falls below this amount, measures should be instituted to correct the deficit except in those cases where special contra-indications exist, as for example in acute circulatory failure, where the lesser of two evils must be followed and fluids restricted temporarily. Edema complicating nephritis is not a contra-indication to the giving of fluids according to the above rules. Nevertheless the restriction of fluids in the management of nephritis is a widely spread practice based on the erroneous belief that diseased kidneys have difficulty in excreting water and that blockage in the kidneys is the cause of so-called nephritic edema. William Thomas<sup>4</sup> says: "Edema in nephritis is not a result of failure or inability of the kidneys to excrete water but is primarily an increased tissue avidity for water; and in addition at times an inability of the blood and vessels to retain fluid." Recent experiments by Newburgh<sup>5</sup> and his associates have also shown the fallacy of these earlier beliefs. They showed that the kidneys of edematous subjects were able to secrete a very large amount of urine containing a normal amount of solids as soon as the patient was permitted to drink a sufficient amount of water. The only contra-indications to the generous use of water in the presence of edema, therefore, are heart failure, cerebral edema and effusions into the serous cavities, but even here the restriction must not be too great.

Water should be given preferably by mouth whenever this is possible. When the ingestion of sufficient water becomes impossible it must be given by other routes. The simplest method that will accomplish the desired purpose should be chosen. Where only small amounts of fluid are required, retention enemas of small amounts of water may be absorbed. Larger amounts of fluid are apt to be expelled, and it is still a controversial question

as to whether any of the dextrose added to the enema is absorbed from the lower bowel. The subcutaneous route may be used for the administration of physiological solution of sodium chloride or of a five per cent dextrose solution but it has distinct limitations. It cannot be long continued because of the pain and soreness produced in the tissues, it may be too slowly absorbed where fluid is urgently needed, and in cases of circulatory weakness and in the presence of edema absorption may be practically nil. It may be used in infants and other cases where the intravenous route is impractical and as a supplementary method to the intravenous route for temporary use where a large quantity of fluid is urgently needed. The intramuscular route has a very limited usefulness for the injection of small amounts of ten per cent dextrose solution in infants; and in these young patients, saline or dextrose solutions may also be given intraperitoneally.

The most satisfactory method of administering fluids parenterally is by the intravenous route. The quantity of fluid given in this way should be estimated according to the rules laid down above. The nature of the solution used for intravenous injection will depend upon the indications in each case. Gamble<sup>6</sup> and his associates have emphasized the important physiological requirement of the interstitial body fluid for a nearly stationary concentration of its substances. The routine use of physiological solution of sodium chloride is not proper. The daily ration of sodium chloride for the average person is about 10 grams and the amount of this salt given intravenously should not greatly exceed this normal ration (which is roughly present in about 1200 c.c. of physiological salt solution). If there has been a loss of the sodium and the chloride ions of the body fluids such as occurs in the presence of vomiting, diarrhea, extreme sweating, drainage from intestinal and biliary fistulae, or massive exudations as from burns, etc., this loss of the body fluid material must be replaced by the administration of sufficient salt solution. On the other hand, water lost from the skin and lungs in the insensible loss is accompanied by negligible amounts of inorganic salts compared to the amounts in the interstitial body fluid. Therefore this water loss results in a concentration of inorganic salts in the interstitial body fluid. When the intravenous injection is given to relieve simple dehydration, an isotonic dextrose solution (which is roughly five per cent dextrose in water) is preferable. The dextrose is quickly oxidized to carbon dioxide and water, thus making the water immediately available for the tissues and for elimination by the kidney. The sodium chloride in salt solution on the other hand tends to hold the water in which it is dissolved. Fantus<sup>7</sup> says: "It is like attempting

<sup>4</sup> Thomas, Wm.: Water Balance, *J. Mich. State Med. Soc.*, Vol. 33—1934.

<sup>5</sup> Newburgh, L. H.: The Foundations of Diet Therapy, *J. A. M. A.*, 105:1034 (Sept. 28), 1935.

<sup>6</sup> Gamble, J. L.: Dehydration, *New Eng. J. Med.*, 201:909 (Nov. 7), 1929.

<sup>7</sup> Fantus, Bernard: Prescribing of Dextrose Phlebolytic, *J. A. M. A.*, 102:2165 (June 30), 1934.

to quench one's thirst on a hot summer day with liberal libations of physiological salt water."

Furthermore if 2,000 to 3,000 c.c. of physiological salt solution are given in twenty-four hours to a patient who has not been depleted of sodium and of chloride, the kidney will be called upon to eliminate 17 to 25.5 grams of sodium chloride. If the kidney function is impaired, the salt may be retained in the body and the excess of sodium ions in the tissues may lead to increased tissue avidity for water resulting in edema, a condition that has been spoken of as salt block.

For it is now generally accepted as proved that the sodium ion increases interstitial tissue thirst for water while the calcium and the potassium ion have the opposite effect. In cases where patients who have not lost considerable amounts of sodium and of chloride are getting intravenous fluids in large amounts daily, 1000 c.c. should be in the form of physiological salt solution and the remainder in the form of five per cent dextrose solution.

In this connection so-called water intoxication should be mentioned as constituting one of the dangers incident to the injudicious forcing of fluids. Rowntree\* in 1923 called attention to this phenomenon in man and experimentally produced the condition in animals by giving them large amounts of distilled water by mouth. These animals showed a definite and consistent series of symptoms characterized by asthenia, muscular irritability, convulsions, salivation and finally death. Cerebral edema was noted at autopsy in all these cases. These animals could be relieved of their symptoms and in fact saved from death by the administration of salt solution. He observed that it was impossible to induce water intoxication in animals that had been given ten per cent solution of sodium chloride immediately before the administration of the water. He concluded that the pathogenesis of water intoxication was probably due to an upset in the salt-water balance. Gatch, Trusler and Ayres<sup>9</sup> found that dogs given 1000 c.c. of distilled water subcutaneously died within about twenty-four hours. Moss<sup>10</sup> and Brockbank<sup>11</sup> noted extreme muscular cramps in workmen who perspired freely and drank large quantities of water. These cramps were relieved at once simply by drinking salt water. Industrial surgeons have noted such symptoms as vertigo, weakness, palpitation, nausea, vomiting, headache, and inward nervousness in men working under

high temperatures. These symptoms were relieved by taking a five grain sodium chloride tablet several times a day. Helwig, Schutz and Curry<sup>12</sup> recently reported a case in which death apparently resulted from water intoxication wherein the patient absorbed 9000 c.c. of tap water by proctoclysis within a period of thirty hours after operation. At autopsy an acute swelling of the brain was found. They were able to reproduce the symptoms and pathological changes in seven rabbits by the administration of large amounts of tap water by rectum. The blood chlorides in all cases were reduced, ranging from 100 to 240 mgs. and the CO<sub>2</sub> combining power was decreased. The chlorine content of all the tissues except the liver was greatly decreased. This would, of course, imply a corresponding reduction in the sodium ion. There was a consistent blood dilution evidenced by the hemoglobin and red blood cell count. General tissue edema was never present.

It would seem, therefore, that a disturbance in the balance between the water and the inorganic constituents of the body, chiefly of the sodium and of the chloride, is the underlying cause leading to the condition designated as water intoxication. Therefore where there has been considerable loss of sodium and of chloride from the body, as in the cases previously referred to, the administration of large amounts of water should be accompanied by adequate sodium chloride for replacement of the depleted body stores in order to avoid water intoxication.

#### SUMMARY

The normal water balance of the body has been outlined with emphasis on the constant insensible loss from the skin and lungs and on the abnormal losses that occur in disease and in the surgical patient. There is an incidental loss of inorganic minerals in the water lost through the abnormal channels. The kidney functions with the water that is available after all other channels of water excretion have been cared for. The water held in the tissues in the presence of edema is not available to the kidney for excretion. The elimination of a sufficient amount of urine is the only practical way of assuring the patient an adequate water intake. In all cases of serious illness an output of 1,000 to 1,500 c.c. of urine daily is desirable. An abundance of water can be best supplied by the intravenous use of a five per cent solution of dextrose. The daily ration of sodium chloride should be supplied, where the patient is not taking a full diet, by a liter of physiological salt solution; and where increased loss of sodium and of chloride has occurred, these minerals should be adequately replaced by additional salt solution. Too much salt solution may cause edema, especially if there is impairment of kidney function. The excessive administration of water without adequate salt replacement may lead to water intoxication.

\* Rowntree, L. G.: Effects on Mammals of the Administration of Excessive Quantities of Water, *J. Pharm. & Exper. Therapy*, 29:135 (Oct.), 1926.

<sup>9</sup> Gatch, W. D., Trusler, H. M., and Ayres, K. D.: Acute Intestinal Obstruction: Mechanism and Significance of Hypochloremia and Other Blood Chemical Changes, *Am. J. M. Sc.*, 173:649 (May), 1927.

<sup>10</sup> Moss, K. N.: Some effects of High Air Temperature and Muscular Exertion Upon Colliers, *Proc. Roy. Soc. London, Series B*, 95:181, 1923-24.

<sup>11</sup> Brockbank, E. M.: Miners' Cramp, *Brit. M. J.*, 1:65 (Jan. 12), 1929.

<sup>12</sup> Helwig, F. C., Schutz, C. B., and Curry, D. E.: Water Intoxication, *J. A. M. A.*, 104:1569 (May 4), 1935.

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AUGUST, 1936

**EDITORIALS**

**MALE SEX HORMONES**

The failure of testicular therapy has been one of the paradoxes of medical treatment of disease. This is particularly evident when we realize that the testicle was the first organ shown by experimentation to possess an internal secretion. In 1849 Berthold demonstrated such an active substance by means of transplantation experiments on capons. Perhaps from the dawn of creation the mirage of rejuvenation through the administration of some potent substance has occupied the thoughts of man. The subject has been before the medical profession since the pioneer work of Brown-Sequard in 1888. Publicity of results secured through the so-called Steinach operation, ligation of the vas deferens, as well as alleged results from various transplantation operations, have resulted in exploitation of hopes that have not attained realization. Nevertheless the interest in the subject had not provoked results in the actual extraction, concentration and isolation of a testis hormone until 1926, when Moore, Koch and their co-workers devised a successful method of extraction. While much more difficult and less obvious problems in the biochemistry of internal secretions of other endocrine glands were being solved, work on the testicular hormone has obviously lagged. The brilliant work already accomplished on the pituitary and female sex hormones has served as an added stimulus, and with the results now apparent, greater progress in the clinical aspect of testis hormones and their application is to be expected. More accurate methods for the detection of the hormones, a better understanding of their chemical nature, and the overcoming of the difficulties in

the purification and synthetization of these substances, as well as definition of their biological action promises more accurate and rapid progress in the knowledge of the whole problem.

In 1931 Butenandt and his associates reported the first isolation of the male sex hormone in crystalline form, securing it from large amounts of human urine. This substance was termed androsterone and was shown to be a derivative in the degradation and hydrogenation of cholesterol. In this work, Butenandt, as well as Ruzicka and his associates, have demonstrated other active derivatives such as dehydro-androsterone, androstane-dione and androstanediol. That they are closely linked with the metabolism of cholesterol is seen as their structural formulae have been worked out. The physiologically active male sex hormones, androsterone and dehydroandrosterone, found in urine have been shown to differ in chemical characteristics and potency from the product secured from testis tissue. Laqueur and his co-workers have isolated in crystalline form a potent substance from testis tissue which they called testosterone, and which appears identical with that prepared by the Ruzicka group from cholesterol. Indications, however, are that testosterone represents the true hormone, and that androsterone and dehydroandrosterone are either intermediates in sex hormone synthesis, or waste products formed from testosterone.

The relationship of the male hormone in exerting an inhibitory influence upon the gonad stimulating action of the anterior pituitary body has been shown in biological studies and in histological examination of the anterior pituitaries of gonadectomized rats. The inter-relationship of these hormones and their proper balance complicates the clinical application of available synthetic preparations. Consequently the therapeutic administration of male hormone is proceeding in a conservative and guarded manner. At the present time two synthetically pure crystalline forms derived from sterols are available commercially. The indications for their use point to cases of infantilism, hypogonadism and certain types of sexual deficiencies. Laqueur appears enthusiastic over improvement in two-thirds of 133 cases of prostatic hypertrophy treated by male hormone therapy. In reports thus far available, nothing approaching permanent results can be considered as indicated. The complexity of the problems presented as to the potency of the product used, the proper dosage, the rate of absorption and elimination and possible by-effects unknown at present, necessitates the need of caution in the administration of these substances. No doubt the numerous biological and clinical problems associated with this question will be solved, but at present their reckless use is to be avoided, not only because of possible cumulative and harmful effects, but also because their action upon the pituitary and perhaps other structures of the body is not clearly known. The indicated relationship, too, be-

tween endocrine activity and carcinogenesis should make us pause for firmer footing. A new principle is an inexhaustible source of new views and so far only the preface in this problem has been stated.

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## JAMES TATE MASON

Messages sent to the House of Delegates of the American Medical Association in session at Kansas City last May by James Tate Mason, president-elect of that body, resulted in his installation as president in absentia, the first occasion of its kind in the history of the Association. Knowing that he was mortally ill, Tate Mason sent messages that could come only from one who had the best interests of his beloved profession at heart. After a most courageous fight, Dr. Mason died June twenty-second, more than a month after his installation.

Tate Mason was no ordinary man; he was a leader in his profession and an organizer of no mean ability. In addition to his business sense, he was possessed of unusual surgical ability, and his work on goiter commanded the attention of the surgical world where he also attained the heights in general surgery.

Dr. Mason's address before our last annual meeting, in Gary, will long be remembered by all present; he was in rare form that evening, and his large audience hung upon his words. Several times, later in the evening, we heard comments to the effect that if we had a half dozen such "ambassadors," the economic problems of medicine soon would be solved. We needed Tate Mason. His city, state and country needed him. It is given to but few men to possess so many admirable qualities as were his, and his passing at such an early age is little short of a disaster; it remains for us only to cherish his memory and to emulate his examples.

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## CONCERNING THE SAFETY CAMPAIGN

In recent months a great deal has been written concerning the increased menace arising from accidents, particularly automobile accidents. That there should be thought and consideration concerning the menace is both proper and timely, but we must be careful not to indulge in hysterics and suppose that the danger is enormously greater than it has been. Actually, the number of deaths from automobile accidents has declined since last year. This is in considerable measure due to the fact that attention has been called to it with the result that people are much more conscious of the problem than they were a year or so ago. It has been strongly urged that instruction in the principles of safety be taught in the high schools

of the state. As a matter of fact, a pamphlet has already been prepared by a recognized authority which goes into considerable detail in pointing out the causes of automotive accidents. Unfortunately this pamphlet does not consider the many other forms of accidents which are as a group just as important as those caused by cars. For example there are the accidents associated with the various sports, industries, and farm and home life. Drowning takes a large toll each year. Fourth of July accidents and others associated with burns are common. There is really as much reason why instruction should be given in regard to these matters as concerning the automobile.

Certain principles should be remembered in considering the proper method of putting this sort of material before the public. We personally are convinced that morbid information which attempts to frighten people into right doing is wrong. The recent editorial entitled "And Sudden Death" is, in our judgment, positively vicious. After reading that article, this writer was so impressed that he could not get into his car either for business or recreation without having before him the horrible possibilities. They were so vivid that on one occasion when he was going through a green light, he "froze" when he saw a fire truck going through the same intersection against a red light. The horrible picture of that editorial flashed through his mind and caused inhibition of the usual reactions which had served him well during many years of automobile driving. Furthermore, we must remember that those persons in the population who are the most reckless and least conservative would not at all be impressed by that editorial. We must remember, too, that the automobile serves very valuable recreational purposes and is, therefore, a great aid to health as well as a menace. It is wrong for anyone to take the pleasure out of the legitimate and proper use of the automobile. We are absolutely convinced that safety can be taught as a positive and healthy attitude toward life and its problems. We are equally convinced that it cannot be taught through morbid warnings against the horrors of the automobile accident at its worst. It is wrong that we put governors on the cars or that we put such inhibitions in the minds of the drivers that they are afraid to go on the road or drive at speeds which are commonly considered compatible with the age in which we live. We shall have to tackle the problem of accident prevention from another angle. From the standpoint of the automobile the "3 E's" undoubtedly offer the brightest promise of success—*Education, Engineering, and Enforcement*. When the young people are trained in the proper use of the car and the rigid tests are made before drivers' licenses are given, when automobiles and highways are built according to safe engineering principles, and when wise laws are rigidly enforced punishing in particular the car which is probably or certainly an accident going some place to happen, then we

shall have accomplished all that may be expected. It is noted that industrial accidents are far less common than they formerly were. Railroad accidents have been reduced to a minimum. In an entire year recently not a single passenger was killed on an American railroad. Last year a great railroad carried 123,000,000 passengers without an accident. More interesting to the people of Indiana is the fact that last year the school busses of the state drove a total of 27,000,000 miles, traveling probably 250,000,000 passenger miles without a single death or really serious accident. How was this remarkable record made? It was made because the State Board of Education, in collaboration with the State Board of Health, and the Department of Public Safety, give a great deal of thought to the construction of school busses, the training of the drivers, and the formulation of sensible rules of school bus operation. Bear in mind that these busses were on the same roads as were other automobiles; indeed, they traveled worse roads on the average. They were in control of about 8,000 different men. The passengers were children who are easily hurt. It was necessary for them to make an unusual number of stops and turns, and yet they were able to carry all of these children without an accident.

The problems associated with safety in transportation and industry *can* and *must* be solved.

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## THE COUNTY SOCIETY SECRETARY

The man who serves as "George" in a county medical society where the "Let-George-do-it" attitude prevails has our utmost sympathy. He seldom is accorded a proper niche in the medical affairs of his home society; he is expected to do about everything, including the impossible, and if he accomplishes that it is taken as a matter of course; if he fails to do everything as others believe it should be done, he is in for a severe censure. Though the local by-laws call for a program committee, the secretary usually is held responsible for the programs; if he puts on a surgical evening, the general men have a grievance, while if he favors the latter, the surgical men solemnly declare such a program holds little of interest to them. He is expected to be a first-class bookkeeper and accountant and his ability as a collector is supposed to be top-notch. If he goes after delinquents in a rough-shod manner, he makes some "sore heads," and if he is lenient, he is upbraided for being so. Coming and going, he "gets his" in plentiful amounts.

A few county medical society secretaries have a comparatively easy time of it; they are in the 100 per cent class—those counties in which every member pays his dues right on the dot. However,

most of the secretaries have to dawdle along with dues collections for the better part of a year. Then if he is a day or so late in remitting to headquarters, and if there is an additional delay of a day or two in returning the membership card, the lowly secretary once more comes in for a good "lacing."

We have been holding this sort of a job for some twenty-five years. Each December we solemnly declare "never again," but on January first of the following year we find ourselves at the same old task, and task it really is. We have come to the conclusion that there are several of the larger county medical societies in Indiana which could well afford a permanent lay secretary. We presume we will offend when we say we would not give this person the title of "executive secretary" but rather get right down to brass tacks and entitle that person "business agent." We are not quite prepared to propose that we form a "union" and ask for a charter from the American Federation of Labor, though there have been numerous occasions when we most devoutly wished that we had such an arrangement, particularly in the last six years when we have had to face situations that would have been better handled by a shrewd business agent.

It is too much to expect of one in active practice, and none other should be made secretary, that he devote his time to such an office unless he is surrounded by competent and willing aids. The demands that are at times made upon him approach the ludicrous. For example, if some quack comes to town it is the secretary who is expected to march in that chap's office and tell him to get out and stay out. If a drugless practitioner essays the field of general medicine, the secretary is expected to supply the remedy. Ask one of the complainers why he does not attend to the matter, and most likely he will answer that he "cannot afford to mix up in such matters—might hurt his business." The Business Agent—and we purposely capitalize the title—can be as hard-boiled as may be necessary, since it is his business to do such things. All this will cost money, of course, but the dividends will well repay such an outlay. It is our firm conviction that any county society with a membership of 100 or more can well afford such a luxury. Those which have tried it, and they are numerous, report signal success in every instance.

In passing, permit us to suggest that if such a program is not available in your society, you at least can give a little more attention to your secretary. It often has been said, and we believe it is true, that the county medical society is the backbone of organized medicine. We will go a bit further and make the observation that the county medical society is quite dependent on its secretary. He needs your active support and cooperation and it should be given him wholeheartedly.

## EDITORIAL NOTES

The 1936 edition of the American Medical Association directory is out, and probably there will be the numerous complaints from laggards in the matter of paying dues. Each time a new directory comes out we receive several such complaints, but we are disposed to regard them lightly. All county society members have ample notice of a forthcoming new volume of the A. M. A. directory, and are advised of the importance of being listed among the elect therein; thus it is their own affair if they are listed as non-members. The number of inquiries coming to one who has an up-to-date edition of this valuable book is amazing, and it is a pleasure to be able to see just who's who; fortunately, the days of extended biographies in medical directories are gone forever.

Some time ago we learned that Dr. Walter Alvarez of the Mayo Clinic had discovered that certain unpleasantnesses he was undergoing were directly traceable to the eating of chicken and that after he discontinued this delicacy in his dietary the unpleasantnesses disappeared. A few days ago a clerical friend (of all folks to have to give up chicken!) stated that he had discovered that an oft-recurring but temporary illness had been traceable to the eating of chicken. While we are of the opinion that this allergy thing has been overdone, we do admit that certain dietary articles do not "agree" with many folks. This fact is most frequently overlooked when we are searching for a cause for a definite trouble in our patients and a careful bit of sleuthing will frequently put us right.

**THESE SPEAKERS WILL APPEAR AT THE  
SOUTH BEND SESSION, OCTOBER 6, 7, 8**

- J. H. J. UPHAM, M.D., Columbus, Ohio, president-elect, American Medical Association.
- B. R. KIRKLIN, M.D., Rochester, Minnesota, Associate Professor of Radiology, University of Minnesota.
- LINCOLN F. SISE, M.D., Boston, Massachusetts, Department of Anesthesia, Lahey Clinic.
- RUSSELL L. CECIL, M.D., New York, Professor of Clinical Medicine, Cornell University Medical College; Professor of Internal Medicine, New York Polyclinic Medical School and Hospital.
- FREDERICK A. COLLER, M.D., Ann Arbor, Michigan, Professor of Surgery, University of Michigan Medical School.
- FRED L. ADAIR, M.D., Chicago, Mary Campau Ryerson, Professor of Obstetrics, School of Medicine of the Division of Biological Sciences, University of Chicago.
- LEE WALLACE DEAN, M.D., St. Louis, Professor of Otolaryngology, Washington University School of Medicine.
- FRANCIS E. SENEAR, M.D., Chicago, Professor of Dermatology, University of Illinois College of Medicine.
- ELMER L. SEVRINGHAUS, M.D., Madison, Wisconsin, Associate Professor of Medicine, University of Wisconsin Medical School.
- JOHN A. TOOMEY, M.D., Cleveland, Associate Professor of Pediatric Contagious Diseases, Western Reserve University School of Medicine.

An exchange makes extended editorial comment on the subject of truth in advertising, and takes occasion to object to the manner in which this rule is enforced insofar as it relates to merchandise but is not enforced when it relates to health. We are in accord with the comment of the writer, for it is certain that advertising quacks and patent medicine manufacturers have little or no restraint upon their activities. Not the least offensive of the various advertising media is the radio, and who is not fed up on the blah-blah put out over the ether regarding the "merits" of this or that medicine or dentifrice? We have frequently remarked and we repeat that it is high time for the Federal authorities in charge of radio broadcasts to put a damper on some of these activities. By the simple expediency of a *united* demand on the part of organized medicine, this thing could be corrected.

Makers of mechanical refrigeration units are all "hopped up" about the general subject of refrigeration. They have employed a group of engineers who seemingly have made extensive study of the subject and their pronouncements reach our desk with surprising regularity. The old idea that all that was necessary to preserve food was to put it somewhere near ice was exploded long ago. We know now that a temperature under fifty degrees Fahrenheit is not conducive to proper preservation of most food products. Thus we say more power to the manufacturers, though we of the older set will regret to see the old natural ice refrigerator discounted. One of our chief youthful joys was to take the express wagon to the ice house, assist in removing the sawdust covering and bring into view the cake of ice which meant innumerable pleasures once it had been transferred to the home "summer kitchen."

*If you would keep pace with your profession, you cannot afford to miss the annual session of your Association. It is actually an intensive postgraduate course combined with planned entertainment for you and your friends. Be in South Bend October 6, 7, and 8!*

Dr. F. C. Warnshuis, secretary of the California Medical Society, says: "Next to your diploma and license to practice, your most valuable asset is your certificate of membership in your county and state medical organization." Dr. Warnshuis is quite correct, though a considerable number of physicians seem to have lost sight of that fact inasmuch as they are very, very tardy in maintaining such memberships. We, of course, refer to the matter of payment of annual county and state dues. Too many physicians allow this thing to run on for several months after the first of the year, then proceed to blame local society officials for their lapse. These same folks think nothing of keeping the golf club dues paid right up to the minute, and do not quibble at spending money otherwise, but when it comes to paying medical society dues, they let out a roar that has many reverberations.

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On May 18, 1936, the California Supreme Court handed down a decision that will prove interesting to our folks, inasmuch as it involves a question raised by the Indiana State Board of Medical Registration and Examination some time ago. It has to do with the much-discussed question of the administration of anesthetics by nurses. Indiana discontinued such practices recently. The court opinion seems to be based upon the time honored rule that nurses at work in the operating room perform their duties under the direct order and supervision of the surgeon in charge, and, therefore, are not subject to the medical practice act. Just what effect this ruling will have in Indiana cannot be guessed. We recall a few months ago that we had a telephone call from a Chicago party asking about the Indiana law in regard to administration of anesthetics, and upon being told of the Indiana regulations, the Chicago man said that such a law was entirely without reason and would soon be attacked in the courts.

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Sixty days hence we will be taking our various ways to South Bend, there to participate in what is certain to be the outstanding convention in the long history of the Indiana State Medical Association. After surveying present plans, we fail to see one single instance in which anything has been overlooked by the various committees. The physical side of things is to be well cared for, with a variety of entertainment not often found at such meetings, and the scientific phases will outdo all former meetings. The scientific program is unusually well selected and we are advised that the scientific exhibits will be on a much larger scale than formerly. Housing arrangements are entirely in the hands of a local committee and we are assured

that South Bend is amply able to take care of an anticipated record attendance. October in Northern Indiana is our most delightful month, and it would be well to make your plans right now, if you have not already done so, to be "in" on a convention that will be outstanding.

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In a news story headed "Many Epidemics Traced to Soviet Cities," Donald Day, a special correspondent for the Chicago *Tribune*, makes it plain that Estonia and Finland regard Leningrad and Moscow as "congested and underfed cities," which are responsible for the spread of certain of the contagious diseases in their countries. This, they claim, is brought about by the numerous excursion parties arranged by the Soviet Union which seem to have attracted many of the citizens of the countries involved. On their return, it is claimed, they carry these diseases into their native countries. It is said that Estonian, Finnish and Latvian health officials, particularly during the winter months, keep a special watch for typhus carriers from Russia. The press of these three countries has recently begun a campaign urging that special measures be taken to prevent these conditions. Yet we have numerous agencies throughout our country which continually preach State Medicine, holding the system now in vogue in Russia before our people as a mighty example of a very "successful system"!

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Organized medicine long has held that the local county medical society is the sole judge of the qualifications of its membership, a ruling with which we have been in accord. It should not be expected that state and national bodies would undertake to decide such local questions. Occasionally, however, cases arise in which for one reason or another the local society fails to take cognizance of the misdeeds of a member. This particular question has been before the Judicial Council of the American Medical Association on many occasions but not until the recent Kansas City session did the Council make a definite ruling in the matter. Their recommendation was adopted by the House of Delegates and is now medical law; it is to the effect that the Judicial Council is empowered to remove from Fellowship anyone guilty of unprofessional conduct and against whom his county society or state association failed to take action. This ruling is eminently fair in that it preserves the right of a county society to determine its membership qualifications, yet makes it possible for the American Medical Association summarily to deal with an offender.

It seems that the chain store optical companies, which for several years have attempted an entrance into Indiana, are hard put to it to keep going. We are informed that there is a scarcity of Indiana-licensed optometrists, because many of the recent graduates were unable to pass the examination required in this state. Some time ago we mentioned the fact that several oculists in Indiana had received postal cards carrying the information that licensed oculists of this state stood in a fair way to earn a weekly remuneration of *twenty-five dollars, plus commission*, if they would sign up and take over the management of one of these offices. Now it seems that these folks have suffered a serious enlargement of the heart, for we have received another postal card announcing that the weekly wage has been raised to *forty dollars plus a commission*. Not long ago this same outfit preached against the use of mydriatics in refraction, but it seems that they have come to believe that it would be a good business stroke to install physicians in their "parlors," mydriatics or no.

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The proposed pure food and drug bill which has been the object of much comment during the past few years failed to receive favorable attention at the hands of Congress. However, the bill had been thoroughly emasculated and scarcely resembled the first draft, so it may be just as well that it did not get along. In the thirty years since Dr. Harvey W. Wiley of Indiana was successful in awakening the American public to the necessity of doing something about our drugs and our food supply, insidious efforts have been made to get around many of the provisions of the original law, and many of these efforts have been sufficiently successful that today we find wholesale violations, notwithstanding sincere efforts on the part of the Department of Agriculture to enforce its provisions. Dr. Wiley did not succeed upon his first attempt, but was compelled to wage his campaign over a long period of years before he could arouse congressional interest in his measure. He succeeded when he was ably assisted by an aroused public. We believe that in the continuation of this fight it will be necessary to enlist the general public in the cause through a campaign of education pointing out the dire need of further regulations.

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The much discussed Cleveland plan of pre-payment hospital insurance came in for some criticism at a recent meeting of the Wayne County (Detroit) Medical Society. It seems that an official of the Cleveland plan went to Detroit to present his ideas on the subject, and he was hard put

to it to hold his own with certain far-sighted members of the Detroit society, notably one Dr. Dave Sugar. In a recent issue of *Detroit Medical News* Dr. Sugar tells about the meeting and lists a group of questions put to the Cleveland representative, none of which were satisfactorily answered. Dr. Sugar pointedly brought out that while the plan might have some merit, insofar as it relates to those at present employed, it did not contemplate hospitalization for others; further, one who carries such insurance and who lost his job would find himself without the fold. In short, Dr. Sugar openly declares that the present plan is little more than a "scheme to balance Cleveland's hospital budgets." It seems quite clear that while the Cleveland plan may have its merits, it falls far short of solving a very vexing problem. In passing, it might be interesting to note that the Cleveland speaker announced that he had "inside information" to the effect that if the present Federal administration is re-elected, we will have socialized medicine in a very short time, for plans are already drawn and ready to be put into execution within a very short time. Remarkable, isn't it, how some folks seem to be able to foretell such things!

#### SOUTH BEND

Will Welcome You to the  
87th Annual Convention

of the

#### INDIANA STATE MEDICAL ASSOCIATION

And Promises a

SUPERLATIVE CONVENTION  
IN EVERY RESPECT

MAKE YOUR HOTEL  
RESERVATIONS NOW

(See Page 389)

## INDIANA STATE MEDICAL ASSOCIATION —



### TRAP AND SKEET SHOOTING AT SOUTH BEND

An increasing interest in trap and skeet shooting has manifested itself at recent sessions of the Indiana State Medical Association, and at South Bend this year the shooters will find that South Bend is well equipped to satisfy that interest. Trap and skeet matches for members of the Association are being arranged. Chairman of the committee arranging this entertainment is Dr. Fred Clapp, 122 North Lafayette Boulevard, South Bend. Those who are interested should write to Dr. Clapp, so that various events may be arranged for the convenience of all who wish to participate.

### GOLF

The annual golf tournament of the Indiana State Medical Association will be held at the South Bend Country Club (Chain o' Lakes) on Tuesday, October sixth, at 9:00 a. m. This is one of the most attractive courses in northern Indiana. It is constructed about a chain of lakes which offer several interesting water holes, and the turf is a soft muck which produces a definite degree of resiliency. Practically the whole course is watered, so prepare to see beautiful green fairways at a time of year when most of the courses are burned and sun-baked.

Everybody will have a chance to win a prize. In fact, the committee hopes to have a prize for everyone playing!



Plan to come and let the committee show you a splendid time on Tuesday, October sixth. Further announcements will be made in the September Convention issue of THE JOURNAL.

### ENTERTAINMENT FOR WOMEN

Entertainment for women this year will be sufficient to keep every attending woman happily busy during her stay in South Bend. Sightseeing tours, tea at St. Mary's College, dinner and bridge at the Oliver Hotel, Breakfast at the Chain o' Lakes Country Club, a garden tour and inspection of the Notre Dame galleries are included in the plans. Your wife will want to be there!

**Detailed Program Will Be Published in the September JOURNAL**

**COME TO SOUTH BEND — OCTOBER 6, 7, 8**

## ANNUAL CONVENTION — OCTOBER 6, 7, 8!

### CONVENTION BILL SAYS —

*Dear Fellow-Hoosiers:*

*The Eighty-Seventh Annual Session of the Indiana State Medical Association opens at South Bend on Tuesday, October sixth, in the Jefferson Plaza Building.*

*This is going to be your own A. M. A. convention, right in your own state, without the expense of long trips and lengthy stays away from home and practice. It will be your own A. M. A. convention in that it will have all of the glamour, set-up, and sidelights of the real convention; there will be no crowded make-shift convention headquarters in an already crowded hotel—a big, roomy, three-story convention building, all will be taken over by the sessions and displays.*

*The commercial exhibits alone will be worth your attendance. These will be grouped in one big hall, easily accessible. Some of the outstanding attractions of the last A. M. A. exhibit are included. The scientific exhibits, too, are concentrated in one room, and the type of program already arranged is going to be hard to beat.*

*There will be plenty of hotel accommodations, but the early reservations will get the pick. The hotel committee this year has adopted the same efficient plan for reservations as is used by the American Medical Association, and they request that you use the coupon found on this page to make your reservation now.*



**JEFFERSON PLAZA**

*All Committees are functioning perfectly, and details already have been completed for two very pleasurable, entertaining and educational sight-seeing trips—one will include the important industries in South Bend where you can see automobiles and auto parts made from raw materials, and the other will take in Notre Dame, its art galleries, St. Mary's College, and a scenic drive along St. Joseph River. You will have a hard time deciding which one to take!*

*As for the ladies—they won't have a dull moment. The Entertainment Committee of the Women's Auxiliary has promised a busy time for all attending women.*

*The Smoker? Not a word about that now—but you have a surprise in store. It is going to be different!*

*The banquet is to be held in the big dining halls of Notre Dame, and it is going to be long remembered because you are going to have the combination of good food, good entertainment, good speakers, and perfect entertainment.*

*I don't want to pep you up too much at this early date—the convention is in October, and if I tell you more about it now, you will want to come to South Bend right away.*

*Watch your JOURNAL for more information from South Bend.*

*Yours until October 6th,  
Convention Bill.*

*P. S. If the golfers and trap shooters don't see something of interest to them in this issue, it is because they don't read their JOURNALS carefully.*

**Send reservations to:**

(For Hotel Rates, Turn to Page xxv)

**Alfred Ellison, M.D.,  
826 Sherland Bldg., South Bend.**

**Please reserve hotel accommodations for the time of the convention of the Indiana State Medical Association.**

**Name \_\_\_\_\_ Prefer Hotel \_\_\_\_\_**

**Address \_\_\_\_\_ Room Requirements \_\_\_\_\_**

## GROUP HOSPITALIZATION VS. HOSPITAL EXPENSE INSURANCE

By L. B. McCACKEN, Manager  
Medical & Dental Business Bureau, Inc.  
Indianapolis

Past and present economic conditions have brought and are bringing about many and various changes both in our social and business life. These changes are taking place in every line of endeavor and there is no exception to the medical profession. Changes, schemes and plans are taking place in other states—some radical, some feasible. However, Indiana so far has been noticeably free from undesirable outside interference. This, no doubt, is due to a well organized State Medical Society.

### GROUP HOSPITALIZATION

Because of the headway that Group Hospitalization is making and the fact that it is getting closer home (just recently it was adopted in Chicago) this subject was discussed at length by the Executive Committee of the Indiana State Medical Association in one of its recent meetings. The profession as a whole is opposed to Group Hospitalization as it is known to the profession today. Naturally, when we hear the words "Group Hospitalization," we immediately criticize.

Since the inception of Group Hospitalization by hospitals a few years back, some insurance companies have made a study of the subject and are writing Group Hospitalization in the form of insurance. Consequently many doctors have spoken out of turn and criticised what looks to be the answer to a troublesome problem. The writer was asked by the Executive Committee of the State Medical Association to clarify for the readers the difference between Group Hospitalization, as issued by the hospital, and Group Hospitalization, as issued by an insurance company.

### WHAT IS IT?

Group Hospitalization is a plan brought about by a hospital, group of hospitals or their agent for prepaying hospital expense. Agreement is entered into with a group of workers saying to that group, "the hospital or group of hospitals will, in consideration of a certain sum of money, furnish the individual or group of individuals necessary hospital service when needed."

The idea of Group Hospitalization was conceived by hospital administrators, doctors and public spirited men and women when they found their hospitals in a critical financial condition and were compelled to fight for their existence. Many and varied attempts have been made by hospitals and associations to solve this great problem. While

tangible progress has been made in some instances the success has been confined to localities which, compared with the full scope of the situation, makes the success negligible. This is not surprising for if any plan is to succeed it must be equally beneficial to the groups interested. Since Group Hospitalization involves three groups, namely, the doctors, the hospitals, and the public, it is unreasonable to expect success unless those involved are mutually benefited. The principle of Group Hospitalization is sound. It is here to stay in some form but as set up at present many of the fundamentals that contribute to its soundness have been overlooked. Since the public pays the freight, it is the first to be considered.

### PUBLIC CONSIDERATION

What right has any hospital, or group of hospitals, to take the public's money without giving some guarantee that the agreement will be fulfilled under any and all conditions? Many things can happen between the time one becomes a subscriber to this plan, and the time he or she has occasion to use the service. Most plans provide that a hospital is privileged to withdraw and discontinue Group Hospitalization if they so desire. What happens to the subscriber in a case of this kind? It might have been the presence of this particular hospital that induced the subscriber to support Group Hospitalization. Perhaps the subscriber's physician has some good reason for using other than a subscribing hospital. Perhaps the services of the subscribing hospital become inferior and the subscriber prefers another. Is it fair to penalize subscribers in such instances?

Consider the small community—what happens where there is only one hospital? Probably an epidemic has filled it to capacity or the hospital meets with some catastrophe. Suppose it burns! The subscriber is the loser. What happens in the cases where the physician feels there should be treatment in a distant hospital due to better equipment to take care of this particular case?

Then there is the subscriber who has been with a certain group for a period of time and for some reason decides to change his work. He may go into a business for himself, or with a group that is not eligible for Group Hospitalization and find that no provision has been made for him or her to carry on as an individual.

Most Group Hospitalization plans are operated only in a certain locality or community. Many subscribers leave the community on business or prob-

ably vacation. In most instances, if the subscriber is hospitalized while away, the association penalizes them.

#### HAS PROBLEM BEEN SOLVED?

When a thorough study is made of most Group Hospitalization plans it is quite obvious that the public did not receive a great deal of consideration. On the other hand, it is obvious that the plan was conceived for the self-preservation of the hospital. But has it solved their problem? This is still a question with many hospital administrators. Some say that writing Group Hospitalization has worked a hardship on the individual hospital by increasing their liability rather than decreasing it. Due to financial strain, the hospital might use the pre-payments to pay past and current bills, and fail to set up a reserve to take care of the expense of future service.

#### ORGANIZATION

It is plain to see how a hospital can very easily build up a vast amount of service obligations. In cases where a group of hospitals have banded themselves together for the purpose of handling Group Hospitalization, a non-profit service organization is usually formed to handle the sales and business details. As a rule, funds are borrowed to start operation. The service organization is empowered by the hospital to obligate them for future service. Payments made by subscribers are retained by the service organization until such time as the hospital renders service but as a rule there is no guarantee or security back of the service organization. One can readily see that vast sums would accumulate and why shouldn't this fund be controlled or supervised by the state the same as in many other businesses? It seems to me that under this plan the hospital holds the sack.

#### WHY NOT ENDORSED BY DOCTORS?

It is easy to see why the medical profession cannot endorse this plan of Group Hospitalization. First, the public has not received the proper consideration. Second, the hospitals have not been fair to themselves. Third, looking at it from the doctors' standpoint, will Group Hospitalization grow to such an extent that the hospital will become the public's hero or idol and take all credit for bringing down medical costs? If so, it will place the doctor in the background and then, too, what is to keep the hospital from going into the practice of medicine by furnishing medical service along with hospital service? Much could be said on this particular phase, but space will not permit.

#### INSURANCE PRINCIPLE

In the hospitals' heroic effort to find a solution they are struggling with many factors which do

not come within the scope of their normal experience nor that of their staffs.

There is nothing new in the principle of Group Hospitalization. It is simply insurance—Hospital Expense Insurance—should be considered and handled as such. Most of us that could afford it have had it for years in our health insurance policies. The hospitals have retained only the hospital benefit of health insurance and by so doing have attempted to bring the cost within the reach of the poor man. Many State Insurance Commissioners have ruled Group Hospitalization as insurance and several good insurance companies are writing it in various forms. The policies which I have seen are quite fair to the public, the hospital, and the doctor.

#### INSURANCE REQUIREMENTS

Our Indiana State Insurance Department is set up for the protection of the public. There are certain requirements which an insurance company must meet before it is permitted to do business in the State of Indiana. The contract which the company proposes writing must be submitted to the Insurance Department for its approval. The policy must be limited in liability and must contain certain standard provisions. This is not only for the benefit of the public, but the insurance company as well. A good Hospital Expense Insurance policy agrees to pay the insured thereunder all hospital expense up to a limited amount for a limited number of days. Ordinarily it is twenty-one days. The amount is payable direct to the hospital and is good in any legally licensed hospital in the United States, providing the insured is admitted by a legally licensed physician or surgeon. The policy does not alter in any way the relationship between physician and patient and does not provide for the fee of any physician, surgeon or private nurse.

After a contract of this nature has been approved by the State Insurance Department, the company is required to make a cash deposit with the State of Indiana to guarantee the fulfillments of such contracts. If the company does not fulfill the contracts, then the state takes the deposit and fulfills the company's obligations.

To date Indiana has been free from any Group Hospitalization program operated by the hospitals and should be kept free.

I will state again that it is strictly an insurance problem for legitimate insurance companies.

The need and the demand is here for this insurance service and it cannot be lightly thrown aside by a wave of the hand.

If you have questions concerning this subject, write to your State Medical Headquarters for particulars.

## PRESIDENT'S PAGE

### E-MEN IN MEDICINE

The medical profession without its journals, like a nation without a public press, would be uninformed, incoordinated, and helplessly inarticulate. It is impossible to estimate the value and influence of these chronicles of medical news and progress.

The E-Men of medicine, the editorial personnel of medical publications, are the directors of this transmission system.

The general plan of state medical journals is directed toward three objectives: First, to teach. Second, to give current information and news. And third, to aid in crystallizing the thought and uniting the activities of physicians.

To teach—the medical knowledge of today is found in its medical journals long before it finds its way into books. State and out-of-state authors contribute scientific studies.

To give current information and news—the very commonplaces of medical happenings, when added up, indicate the general drift of the profession. It is the unconscious deviation from the desirable line of progress which is most disastrous and requires constant observation and correction. The advances and regressions indicate if medicine is maintaining its proper position despite social changes. The line does not always move with the same speed in different communities, and local factors and local personalities may influence progress. These experiences are reported for the benefit of the whole group. News—comings and goings—marriages—sickness and death—all meet individual interests.

The first and second objectives require analysis of material submitted, and discrimination as to scientific foundation, sound judgment of conditions described, and possible helpfulness of suggestions submitted.

The third objective—crystallization of thought and coordination of activities—places full responsibility upon the editorial forces—interpretation of conditions, analysis of causes, and unbiased statement of conclusions. Fair criticism is a method of judgment and free discussion leads toward general agreement of decision.

The editor must be broad in his interests. Medical men are individual workers—medical information is to a great degree specialized. In general matters, too often the individual does not have the broad facts or the perspective to recognize the underlying principles or the ultimate effects. Unethical conduct and unfair economic practice are the acts of individuals or small groups in localized areas. Medical organization and its editors bear the responsibility of assisting to a broader perspective, scientifically, ethically, geographically, and from the viewpoint of

time, that unity of purpose and action may be gained.

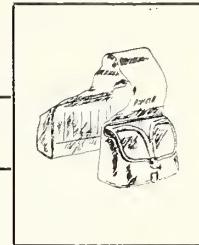
Speaking "for" the profession, as well as speaking "to" it, imposes the responsibility of an agent. The profession of a state may be judged by the character of its medical publications. Unfounded observation, or material inconsistent with accepted standards, reflects upon the E-Man personnel. The state journal speaks for the group collectively, and its editorial policy should be guided by those judgments upon which there is some general agreement. Complaining of the present and fearing the future are not sufficient as an editorial policy—criticism must be constructive, achievements and progress must be recognized, and effort must be made to discern future probabilities from the mass of hazy and conflicting trends. Here is the diagnostic ability of the editor tried and his vision tested. Historian, constructive critic, philosopher, writer—these are some of the qualifications of an editor. The journal is the show-window of the profession, in which it may collectively display its medical knowledge, boast of its successes, relate its history, advertise its peculiar qualifications, depict its promising future, point to its high ideals, and, betraying the humanness of its directors, omit its minor frailties.

The Indiana State JOURNAL is outstanding among state medical publications. The original material is selected with care, its editorials are comprehensive, fair, clear-cut, constructive, and looking to the future. Excellent special articles vary from the history of Indiana medicine to present-day legal problems, secretaries' conferences, and subjects of current interest. Miscellaneous articles contain news notes and medical organization matters. Advertising is restricted to ethical advertisers. The physical make-up of the JOURNAL is good and constantly is being improved and enlarged.

The JOURNAL is now in its twenty-ninth volume. Many who recall Indiana medicine prior to the establishment of the JOURNAL frequently refer to its helpful influence in the progress of the profession.

It would not be becoming in modesty for those who edit the JOURNAL to spend its lines in praise of it. However, on the President's Page, I believe that the members would wish me in their behalf to pay a tribute of appreciation to those E-Men and E-Women to whom we are indebted for the successful development and outstanding character of THE JOURNAL of the Indiana State Medical Association.

*R. H. Denoerick*



## Indiana Medicine in Retrospect

L. G. ZERFAS, M.D.  
Historian, Indiana State Medical Association

### ORGANIZERS OF SECOND DISTRICT MEDICAL SOCIETY

Whether the five physicians who were appointed by the Law of 1816 to form the Board of Medical Censors for the Second Medical District of Indiana met in 1817 has never been determined, but the available newspapers report meetings in 1820, 1821, 1822, and 1824. These meetings seem to have been held in a different county each time, and at the one of June 28, 1821, "it was resolved unanimously that the members of the Society dine together at each semi-annual meeting." The biography of Dr. Andrew Paxton Hay has been given in connection with the Transylvania graduates. The other censors of the Second Medical District are as follows:

**DR. BURR BRADLEY<sup>1</sup>**

Dr. Burr Bradley was born February 17, 1790, in Fairfield, Connecticut, the son of Major Daniel and Elizabeth (Stratton) Bradley. He graduated from Yale University in 1808 and attended Columbia College Medical School, where he was associated with Dr. J. B. R. Birch, one of the leading physicians of New York. He was issued a license to practice by the Connecticut Medical Society, May 16, 1815, and September 24, 1816, was elected to the "Physico-Medical Society of New York." After a short time spent in Zanesville, Ohio, Dr. Bradley moved to Salem, Indiana, where on September 3, 1817, Colonel Samuel Milroy appointed him surgeon of the Ninth Regiment of the Indiana Militia with the rank of captain. June 4, 1818, he married Esther Williams Plumer in Marietta, Ohio, and brought her to Salem.

Dr. Bradley compiled the earliest maps of Washington County, was a physician to the poor in 1818, was a trustee of the Presbyterian Church and of the Washington County Seminary, and assisted in the organization of the Temperance Society. He was postmaster from 1825 to 1829 and county treasurer in 1834. Besides being named one of the first censors he took an active part in all the meetings held in Salem. In 1830 he went into partnership with Dr. Ezra Child. During the epidemic of 1833 he and Dr. Charles Hay fought the cholera together and published a long article on the treatment of it. In 1847 he followed Dr. Charles Hay to Warsaw, Illinois, where he died July 1, 1849, of cholera.

**DR. PELEG RICHARD ALLEN<sup>2</sup>**

Very little is known about Dr. Allen. He was in Indiana in 1816, and on December 15, 1817, bought lot No. 32 in the town of Paoli. Dr. Asahel Clapp in his diary mentions that June 6, 1823, Dr. P. R.

Allen stopped the afternoon and night with him on his way east from Paoli. On July 5, 1823, Dr. Allen and his wife arrived from the eastward and stayed two days with Dr. Clapp. This must have been when he married Miss Ann B. Leonard, the daughter of Timothy Leonard, of Lansingburgh, New York. Her brother, Frederick B. Leonard, was a student of medicine under Dr. Allen, which suggests that Dr. Allen came originally from New York. He died probably in the spring of 1825, for his will, probated on May 25, appointed his wife and his friends, Dr. Burr Bradley, of Salem, and Dr. William A. Scribner, of Paoli, as executors. Later Mrs. Allen moved back to Lansingburgh and married John Holm.

**DR. JAMES BROOKS SLAUGHTER<sup>3</sup>**

Dr. James Brooks Slaughter was born in Nelson County, Kentucky, in 1792, the son of Thomas Coleman Slaughter. In 1812 he passed through Corydon on a military expedition and the next year he located there permanently. He married Delilah Spencer, daughter of Spier Spencer, the hero of the battle of Tippecanoe. We have no information as to Dr. Slaughter's medical training or anything about his ability. He is better known as a politician. Except for four years when he was elected to the Senate, he served almost continuously in the House of Representatives, from 1817 until the time of his death. In 1824 he was spoken of as a candidate for Secretary of State. In 1827 he proposed the postponing of any amendment to the Act of 1825 regulating the practice of medicine and surgery, and in 1829 was on the committee for the amendment of this same bill. Dr. Slaughter died of cholera in 1832, leaving a family of six children. His son, Dr. W. W. Slaughter, was a prominent physician in Harrison County in the decade following the Civil War.

**DR. SAMUEL MERIWETHER<sup>4</sup>**

Dr. Samuel Meriwether was probably the first physician in Jeffersonville, Indiana. He was a native of Jefferson County, Kentucky, and studied medicine under Dr. Benjamin Rush in Philadelphia. He married his cousin, Mary Meriwether, in Kentucky, and soon after entered the army as surgeon's mate during the War of 1812. For some time he was stationed at Vincennes and for three months was unable to communicate with his wife. Finally, obtaining a leave of absence, he returned home and took his wife to Vincennes. He remained there until 1815 when he resigned and began prac-

ticing in Jeffersonville. From 1824 to 1830 he lived in Louisville, but returned to Jeffersonville then for the rest of his life. He inherited several slaves, but believing the system wrong, he gave them their freedom. He was one of the founders of the Presbyterian church in Jeffersonville. He was a very successful physician and a prominent citizen, but did not take an active part in the formation of the medical societies.

#### THIRD DISTRICT MEDICAL SOCIETY

The Medical Society of the Third District did not meet until August 30, 1817, but in June, 1817, a notice appeared in the paper that any physician wanting a license might apply to the censors and be examined. At the first meeting held at Lawrenceburg, the Society of the Third Medical District was organized and officers were elected. Dr. Ezra Ferris' biography has already been given in connection with the passing of the first state law. A brief biography of each of the other four censors follows:

#### DR. JABEZ PERCIVAL<sup>5</sup>

Dr. Jabez Percival was born July 16, 1760 in Chatham, Middlesex County, Connecticut, the son of Captain Timothy and Mary (Fuller) Percival. In 1781 Dr. Percival served three months as a private in the Revolutionary War and later studied medicine and practiced near New Amsterdam, New York, where he married Elizabeth Stearns. He and his family came to Lawrenceburg in 1801 where he erected a double log cabin on the river bank. He served as territorial judge from 1803 to 1814 and was the contractor for the old brick courthouse in 1810. He later built a two-story brick house on the southwest corner of New and Vine streets, where he had his office; he rented the second floor to the Masons for a lodge room. At the first meeting of the Board of the Third Medical District held August 30, 1817, in Lawrenceburg, Dr. Percival was elected president, and his son, Dr. John S. Percival, was granted a license. According to newspaper notices, Dr. Percival was president of the Society in 1821 and in 1825, and may have served continuously. In 1826 he was named again as a censor for the Third District. He was described as a man with an iron constitution and will, who was skillful and proficient in both physics and surgery. On January 21, 1825, in the Indiana *Palladium*, Lawrenceburg, is the following notice: "You have called for me by day and night, pleasant or unpleasant I attended your calls; now I call on you who are in arrears for immediate payment or at least a settlement; if you neglect this call the next will be accompanied with cost. Jabez Percival." He died in Lawrenceburg on June 28, 1841.

#### DR. DAVID F. SACKETT<sup>6</sup>

Dr. David F. Sackett was probably the first physician in Wayne County, Indiana. He was born January 18, 1780, in East Greenwich, Connecticut. His father, Dr. Samuel Sackett, a surgeon in the Revolutionary War, moved to Uniontown, Pennsylvania, in 1781, and to George's Creek in 1788. Here

David Sackett studied medicine with his father and then attended medical school in Philadelphia and began practice in Greensburg, Pennsylvania, where he married Miss Martha Millikan in 1807. The next year they located near Hamilton, Ohio, and in 1810 settled in Wayne County, Indiana. He was the first postmaster in Salisbury and Centerville, having held that office fourteen years and was the first recorder of the county, having been elected for three terms of seven years each. He served first in Salisbury, but removed to Centerville when the county seat was moved. Dr. Sackett was named



Dr. David F. Sackett

(Secured through the courtesy of L. M. Feeger, *Palladium Publishing Corporation*, Richmond)

one of the censors to organize the Third District Society, but he is not mentioned as having been present at the first meeting held at Lawrenceburg. He continued to practice in Centerville until 1860 and died in Irvington in 1865, aged 85 years.

#### DR. DAVID OLIVER<sup>7</sup>

Dr. David Oliver was born at Marietta, Ohio, in 1792, the son of Robert Oliver, a colonel in the Revolutionary War who came west with General Putnam to Harmar, Ohio, in 1788. Dr. Oliver was in the War of 1812 and served two years as a privateer acting under letters of marque from the Republic of Columbia, S. A. He was severely wounded in a naval engagement with a Spanish man-of-war. He moved to Brookville, Indiana, in 1816 and married Mary Wade, of Cincinnati, Ohio. He was an Ensign in the Sixth Brigade, Third Division in the military organization of 1817, and a member of the House of Representatives from Franklin County, in 1823 and 1825, and of the Senate from 1825 to 1828. He was grand marshall of the vigilance committee formed under Judge Lynch's code to rid the country of horse-thieves and counterfeitors, and was one of the first officers of Harmony Lodge No. 11, F. & A. M., in 1822. Besides being named as censor for the Third Dis-



Dr. David Oliver

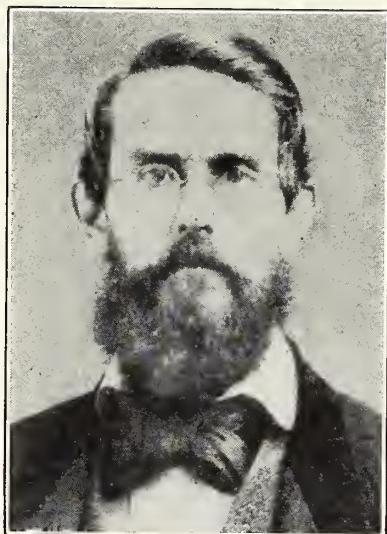
(Secured through the courtesy of the Wm. H. Smith Memorial Library, Indianapolis)

trict by the Act of 1816, Dr. Oliver was a member of the First State Medical Society and again appointed censor in 1823. He was first vice-president of the Indiana State Medical Society in 1826.

Dr. Oliver later moved to Lebanon, Ohio, where he took an active part in public affairs and was the ruling elder of the Presbyterian church. He died there in June, 1869.

DR. JOHN HOWES<sup>8</sup>

Dr. John Howes, a native of Connecticut, was born in Tolland, June 5, 1786. He graduated when twenty-five years old from the College of Physicians and Surgeons at Fairfield, New York, and moved to Madison, Indiana, in 1814, about three years after the first settlement in that place. The *Indiana Republican*, Madison, Indiana, May 24, 1817, had the



Dr. John Howes

(Secured through the courtesy of H. S. Wedding, Librarian of Wabash College, and Mrs. Benjamin Crane, Crawfordsville)

following notice: "Dr. John Howes, of Madison, has lately received vaccine matter from the U. S. agents, with a request that he would act as an assistant, to facilitate the distribution and thereby extend its use more generally. It is put up in small packages, and the directions are such as will enable any person or family to secure themselves from the smallpox. Physicians and private families can be furnished with matter warranted to be genuine at the subscriber's Medical shop; and individuals or families vaccinated on application. He has on hand and will constantly keep a general assortment of drugs and medicines of good quality. N. B. Those indebted for Medicine or Medical services, must settle their accounts without delay." In the same paper for February 28, 1818, Dr. John Howes was elected librarian for the Madison Library Society. In January, 1821, he formed a partnership with Dr. Robert Cravens, continuing until Dr. Cravens' death. On September 29, 1821, he married Mrs. Eliza Hale, of Massachusetts, but she died May 24, 1829; July 18, 1832, he married Miss Frances Johnston, of Sidney Plains, New York. Dr. Howes suffered from tuberculosis for a long time and before his death became deeply religious. He died February 21, 1839.

<sup>1</sup> *Indiana Intelligencer and Farmers' Friend*, Charlestown, Indiana, Nov. 7, 1821, p. 3, c. 3; June 18, 1823, p. 3, c. 2. *Indiana Farmer*, Salem, Indiana, July 19, 1822, p. 4, c. 4. Letter of J. S. Bradley, Toledo, Ohio, May 26, 1936. Lawrence W. Paynter, *A Medical History of Washington County, Indiana*, 1931, p. 13. *Washington County, Indiana, Deed Book*, I, p. 371; K, pp. 81 and 146; L, p. 281. *Western Sun*, Vincennes, Indiana, June 27, 1829, p. 3, c. 3. *Western Annotator*, Salem, June 20, 1830, p. 3, c. 5; July, 1833. *Indiana Journal*, Indianapolis, July 20, 1833. Letter of Mrs. Harvey Morris, Salem, Indiana, April 28, 1936.

<sup>2</sup> Orange County, Indiana, *Deed Book A*, p. 240; *Book D*, p. 30; *Will Book I*, p. 26.

<sup>3</sup> *Biographical History of Eminent and Self-Made Men of the State of Indiana*, Western Biographical Pub. Co., Cincinnati, 1880, District 1, p. 51. Wm. H. Roose, Indiana's Birthplace, p. 26. Notes from an interview with Mrs. Lillie Rutledge, October 16, 1935. Legislative and State Manual of Indiana, 1899-1900, Compiled by Wm. E. Henry, Wm. B. Burford, Indianapolis, 1899, pp. 55 and 67. *Western Censor and Emigrants' Guide*, Indianapolis, December 14, 1825. *Indiana Journal*, Indianapolis, January 20, 1827; January 14 and 17, 1829. *Will Book B*, Harrison County, Indiana, p. 19.

<sup>4</sup> Lewis C. Baird, *History of Clark County, Indiana*, B. F. Bowen & Co., 1909, Indianapolis, p. 412.

<sup>5</sup> Archibald Shaw, *History of Dearborn County, Indiana*, 1915, p. 365. Judge Ricketts, MSS., "The Medical Profession." D. A. R. Lineage Book, Vol. 23, p. 164. Lake, Griffin & Stevenson, *Atlas of Dearborn County, Indiana*, Philadelphia, 1875, pp. 10 and 18. Albert T. Gridley, *Atlas of Dearborn County, Indiana*, Indianapolis, 1899, p. 8. Letter of Archibald Shaw, Helena, Arkansas, March 28, 1936. *Indiana Republican*, Madison, Indiana, September 6, 1817, p. 3, c. 3. *Lawrenceburg Palladium*, Lawrenceburg, Indiana, November 4, 1825, p. 3, c. 4. *The Oracle*, Lawrenceburg, October 13, 1821, p. 3, c. 4. *Indiana Journal*, Indianapolis, February 20, 1827. *Indiana Magazine of History*, Vol. 8, 1912, p. 19.

<sup>6</sup> Andrew Young, *History of Wayne County, Indiana*, 1872, p. 168. History of Wayne County, Indiana, Inter-State Pub. Co., Chicago, 1884, Vol. I, p. 566. Harry Dorsey Bertsch, *Richmond Palladium and Sun-Telegraph*, Richmond, Physicians Played an Important Part in the Early Development of Wayne County, December 14, 1933.

(Continued on Page 398)

## INDIANA UNIVERSITY MEDICAL LIBRARY

By ALLAN HENDRICKS, Librarian



*Allan Hendricks*

Perhaps no library in Indiana has shown a more gratifying degree of development than that of the Indiana University School of Medicine since, at the session of 1927, the General Assembly of Indiana made a direct appropriation for the establishment of a medical library to serve

the profession of the state.

This legislative grant was made in recognition of the importance of an adequate library in maintaining the standard of medical practice in Indiana as well as in the education of students and in the promotion of research.

Today, in spite of necessarily decreased appropriations from the funds of Indiana University, the library, measured by number of volumes, ranks well above the average of medical libraries in the United States. In quality of the material on its shelves, also, it is entitled to a high standing, for by far the greater number of its volumes is the careful choice, made in recent years, of that which is of maximum value to the present day practitioner or research worker. Among its patrons the reputation of the library has fully kept pace with its increase in size, and there can be no doubt that it has had a stimulating influence upon those of the profession having access to it.

The Indiana University School of Medicine, located upon the campus of the Indiana University Medical Center, at Indianapolis, represents by merger all the worthy preceding schools of the state that were not otherwise discontinued. Its library had its beginning in the volumes to which it thus fell heir. There are a number of books on its shelves that bear the book plates of "Bobbs' Memorial Hall and Library" of the Medical College of Indiana, and of "The Haymond W. Clark Library" of the Central College of Physicians and Surgeons. On the establishment of the present school in 1908 the general library of Indiana University at Bloomington donated several files of medical journals, and other gifts followed from friends of the school. The real growth, however, began with the legislative appropriation of 1927.

The value to the medical profession, and to the school, of these later purchases is well shown by the increase of nearly fifty per cent in the circulation of the year following the first extensive purchases, and the further increases of fifteen to twenty per cent in each of the succeeding years. Preceding these purchases the position of the library in the matter of inter-library loans had

been only that of a borrower; today, considering loans to local libraries as well as to those outside the state, our inter-library loans greatly outnumber our inter-library borrowings in number of items. Loans to individuals outside of Indianapolis are made only through the library most convenient to the borrower, a rule made necessary as an insurance against irresponsible applicants. The patronage of the library is by no means confined to the faculty and students of the school, nor is it limited to the medical profession. Manufacturers, chemists, attorneys, the teaching staffs of neighboring educational institutions, and sometimes accredited individuals of no scientific connection are not infrequent borrowers.

It is well known that in the present rapid development of medicine a textbook often ceases to be the last word on its subject between the preparation of the manuscript and its issuance from the press, although a monograph devoted to a single topic may keep more nearly abreast of the times. It is in the periodicals that the latest facts, theories, means of diagnosis, methods of treatment and pertinent facts are to be found, and without these journals, and the indexes that make their contents available, the practitioner cannot thoroughly know current trends and the newest discoveries, nor can the research worker know what investigations have preceded his own. As neither physician nor surgeon can subscribe for and preserve all the best of the world's periodical literature, the profession not infrequently finds need to look to a library for many such journals and for the indexes covering their contents of former as well as of current years. The discoveries of the present should be at hand as well as the seasoned knowledge of the past.

Recognizing this, although by no means ignoring the importance of notable recent texts and monographs, the library of Indiana University School of Medicine spends well over one-half its annual capital outlay for the most important periodicals published in the various countries that are foremost in the development of medicine and surgery. In all nearly four hundred periodicals are regularly received. The binding of these journals for preservation is the second greatest item of expense. The outlay for books and monographs ranks third in amount, followed by disbursements for the filling of gaps in journal files, equipment, supplies, expressage and postage, and the incidentals that may arise.

Although neither the funds nor the primary purpose of the library allows the purchase of the rarities in medical classics, we have a number of somewhat later and less expensive editions, and in lieu of the more costly works we have a growing

collection of their facsimiles and reprints. The most conspicuous of these is the *Icones Anatomicae* by Andreas Vesalius, recently published by the New York Academy of Medicine in cooperation with the University of Munich. This contains all the illustrations of the works of Vesalius published during his life time, most of them printed from the recently re-discovered original woodblocks cut by John Stephen, of Calcar, a pupil of Titian. The descriptive text, as written by Vesalius, is printed in the original Latin. This very handsome volume is a noteworthy asset to any medical library not able to secure the very expensive editions of nearly four hundred years ago.

A recent addition, given the library by Dr. George A. Collett, of Crawfordsville, is a series of engravings of the anatomical sketches of Leonardo da Vinci, made in 1795 by Francesco Bartolozzi, a member of the Royal Academy and the Historical Engraver to His Majesty George Third. These rare engravings are no doubt the first reproductions of Leonardo's anatomical drawings and were made from the sketch books that have been in the Royal Library at Windsor Castle since the reign of Charles Second, where much of the anatomical work of that most versatile genius is preserved. These sketches remained unappreciated until the latter part of the eighteenth century when they

were brought to the attention of William Hunter, who recognized their value and gave them some degree of public recognition. Nevertheless it has been only in the past forty years that Leonardo's place as the forerunner of iconographic anatomy has been generally appreciated. The published work of Vesalius, of a somewhat later period, revolutionized anatomy while Leonardo's drawings, first reproduced more than two hundred and fifty years after his death, were known to comparatively few.

Among other facsimiles are those of the *Fasciculus medicinac* of Johannes de Ketham, of 1491, the first medical book to be illustrated with wood-cuts; a group of ten brief tractates on syphilis printed between 1495 and 1498, the earliest printed literature on the subject and among the rarest and most important incunabula; the *Musculorum humani corporis* of Giambattista Canano,

of about 1541, with drawings by Girolamo da Carpi, which the author suppressed after he had seen the unpublished wood-cuts of Vesalius, and of which only eleven copies are known to exist today; The *Buch der Wund-Artzney*, by Hieronymus Brunschwig, of 1497, containing the first detailed description of gun-shot wounds; the first edition of Edward Jenner's *Inquiry into the causes and effects of the variolae vaccinae*, of 1798; the first edition of William Harvey's *Exercitatio anatomica de motu cordis*, of 1628, reproduced from the faultless copy in the University Library of Gottingen; Thomas von Brabant's manuscript on gynecology, of about 1240; *Dc venarum ostiolis* of Hieronymus Fabricius, of 1603, to which in great measure may be attributed Harvey's discovery of the circulation of the blood; Beaumont's *Experiments and observations on the gastric juice and the physiology of digestion*, 1833; and with other facsimiles, the second edition of Laennec's *Traite de l'auscultation medicale*, of 1826, the last edition revised by the author. There are various other important works in the original or in translation, though not in facsimile, among which is that most celebrated of medical poems, the *Syphilis sive morbus Galli-cus*, 1530, of Fracastorius.

On the walls of the reading room hang a number of portraits of men who have been prominent in the

medical history of Indiana and in medical education in the state. Some of these portraits show the garb and the whiskers of long ago, such as those of Dr. John Stough Bobbs, Dr. Charles Parry, and Dr. Robert Cravens, the latter portrait being of about the year 1821, the recent gift of his granddaughter, Miss Drusilla L. Cravens, of Madison. There also hangs a beautifully engraved copy of Dow's painting of "The Woman with the Dropsy," the gift of Mrs. Albert J. Beveridge. The library also owns, by the gift of Dr. Frank A. Brayton, the original photograph of Mrs. Z. Burnworth, taken in her later years, upon whom Dr. John S. Bobbs performed, in 1867, the first cholecystectomy in medical history. Supplementing these portraits the library is collecting photographs, engravings, and prints of individuals and groups, and of the older medical schools and hospitals, old diplomas and licenses to practice, and



*A Corner of the Medical School Library*

all other objects connected in any way with medical history, particularly that of Indiana. An especially valuable item in our collection of such material is a volume of notes taken by Dr. Robert Cravens, of Madison, in 1815-1816, at the lectures on surgery delivered by Dr. Philip Syng Physick and Dr. John Syng Dorsey, of the Medical Department of the University of Pennsylvania. Another item of note is a manuscript abridgment, made considerably more than one hundred years ago, by Dr. Joseph W. Lanier, also of Madison, of the works of the then most prominent writers on anatomy. These two volumes are also the gift of Miss Drusilla L. Cravens. Among other such memorabilia that have come to us is the certificate of membership in the Indiana State Medical Society, as it was then called, issued to Dr. James Cochran, of Spiceland, in 1870, and given by his sons and granddaughters; a fee bill of the Lawrence County Medical Society, of 1886, from Dr. Robert B. Smallwood, of Bedford; and a photostat of a fee bill of 1869 of the St. Clair and Sanilac County Medical Society, of Michigan, from Mr. J. B. H. Martin, Administrator of the Indiana University Medical Center.

Our museum of old instruments has grown very considerably in the past year and has become one of the noteworthy features of the library. Visitors and students alike show an increasing interest in it. Among the exhibits is what is probably the first hypodermic syringe brought to Indiana. It was bought in Paris in 1867 by Dr. John M. Kitchin, only eleven years after Dr. Fordyce Barker introduced the instrument to America. The peculiarity of the mechanism is that the piston is worked in and out by means of a threaded rod, each revolution of the handle discharging two minims. The needles are of gold. A formidable device of brass and rubber tubing is the stomach pump bought by Dr. William Clinton Thompson, also of Indianapolis, in 1846. It is essentially a syringe of large capacity with lever-controlled valves to reverse the action for gastric lavage. Although the use of a stomach tube in connection with a syringe or elastic bulb for suction in extracting poisons from the stomach was suggested in 1797 and was probably first employed for that purpose by Dr. Philip Syng Physick, of Philadelphia, in 1809, metal piston pumps seem not to have been used until about 1823 and did not come into general use until some years later. Among the other displays, which are changed from time to time, are spring lancets; scarifiers with various numbers of knives; cupping glasses of many styles; stethoscopes of wood, all metal, or of more recent types; a pill-roller of the days when physicians "rolled their own"; ophthalmoscopes of various ages and degrees of development; specula of divers kinds; pill bags of the lengthy period of bad roads; obstetrical forceps of the long ago; a Faradic pocket battery of French make; a unique nursing bottle of the middle nineteenth century; a specimen of

the Reverdin needle; one of "Russell's Instantaneous Bloodless Aspirator and Trocar Combined"; a combination of scissors and knife used by an Indiana physician who died in 1821; several mahogany cases of surgical instruments of the Civil War and later years; and a variety of other devices that served their purposes more or less successfully in days that are gone.

To the many friends who have shown their interest and generosity by valued gifts, the library of the Indiana University School of Medicine tender its cordial thanks and grateful appreciation.

### LEUKORRHEA

(Continued from Page 378)

5. The adnexa are not usually considered a cause of leukorrhea.
6. Endometritis as a cause of leukorrhea is an unusual one.
7. There are no specifics for the treatment of trichomonas vaginalis vaginitis.
8. Monilia infection of the vagina is almost specifically treated by the use of one or two per cent gentian violet.
9. Forty-five per cent of vaginal and cervical infections are due to gonorrhea.
10. Functional leukorrhreas are best treated by building up the patient's general resistance.
11. All cases of leukorrhea deserve an examination before empirically prescribing a douche.

400 NORTH STREET.

### INDIANA MEDICINE IN RETROSPECT

(Continued from Page 395)

<sup>7</sup> History of Cincinnati and Hamilton County, Ohio, Cincinnati, Ohio, 1894, p. 618. History of Butler County, Ohio, Western Biographical Pub. Co., Cincinnati, Ohio, 1882, p. 546. Atlas of Franklin County, Indiana, J. H. Beers & Co., Chicago, 1882, pp. 79 and 96. *Western Censor and Emigrants' Guide*, Indianapolis, December 15, 1823. *Indiana Journal*, January 5, 1826. Indianapolis.

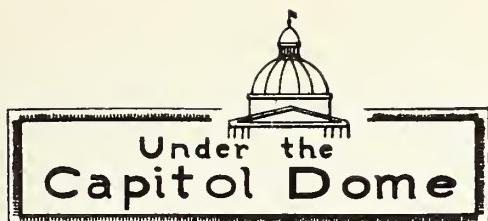
<sup>8</sup> Obituary of Dr. John Howes, in possession of Miss Drusilla Cravens, Madison, Indiana. Drusilla Cravens, History of Jefferson County, Indiana, MSS.

### INDIANA DIVISION OF PUBLIC HEALTH

#### BUREAU OF COMMUNICABLE DISEASES

##### Monthly Report, June, 1936

Diseases	June, 1936	May, 1936	April, 1936	June, 1935	June, 1934
Tuberculosis	128	181	215	193	197
Chickenpox	67	132	215	89	80
Measles	40	84	105	343	2,083
Scarlet Fever	222	525	1,235	232	233
Smallpox	15	8	16	4	6
Typhoid Fever	16	6	4	10	34
Whooping Cough	119	109	165	11	265
Diphtheria	27	33	47	55	40
Influenza	33	123	378	27	30
Pneumonia	65	104	202	67	18
Mumps	82	314	407	80	13
Poliomyelitis	0	2	1	2	1
Meningitis	6	24	23	9	3
Encephalitis	0	0	0	1	0
Undulant Fever	2	6	0	2	3
Rabies in Man	0	1	0	1	0
Trachoma	0	0	0	0	1
Pellagra	0	0	0	2	0
Paratyphoid Fever	0	0	0	1	0



## STATE BOARD EXAMINATIONS

A total of 121 candidates took the examination conducted by the State Board of Medical Registration and Examination on June 23 to 25, inclusive. In addition fourteen took the sophomore examination. The examinations were conducted in the Hotel Lincoln in Indianapolis. Miss Ruth V. Kirk, secretary for the medical board, said that certificates will be issued about September 1.

## PERSONNEL CHANGES

W. H. Frazier, who has been executive engineer in the state division of public health, has been appointed assistant director of the division. He succeeds Dr. Thurman B. Rice who resigned recently to become director of the new health and physical education department, a joint project of the health and education departments of Indiana.

Mr. Frazier, a native of Bluffton, is the first non-medical man to hold the post as assistant director of the health division. He has been executive engineer since 1935. During the two years previous Mr. Frazier was sanitary engineer of the state conservation department.

Dr. Verne K. Harvey, director of the health division, said that Mr. Frazier will continue his work as executive engineer in addition to his new duties as assistant director.

## WATER SHORTAGE

Bulletins pointing out dangers resulting from the shortage of the rural water supply that has been caused by the drought have been sent to county health commissioners and county agricultural agents by the state division of public health.

"In many rural districts in southern Indiana conditions have become critical because of an actual shortage of drinking water," the bulletin said. "Wells and cisterns have failed in many localities and people are resorting to the use of creek or river water for drinking and domestic use."

"This," the bulletin continued, "is an extremely dangerous practice unless the creek water is boiled or treated with chloride of lime before it is used for these purposes."

Dr. Verne K. Harvey, director of the health division, is urging physicians to cooperate with the department by calling attention of their clients in affected areas to the dangers of using unsterilized creek and spring water.

Directions issued by the department for sterilization of water follows: "In order to insure complete sterilization water should be boiled for at least twenty minutes.

"If the water is not clear, allow it to stand until as much mud as possible settles out. Draw off the clear water.

"Add three tablespoons of chloride of lime to one pint of water. Use two tablespoonfuls of this solution to fifteen gallons of water or thirty-six drops to one gallon."

## PUBLIC HEALTH NURSING REQUIREMENTS

The state board of health has adopted new regulations and higher requirements for public health nurses employed by county commissioners and city councils in connection with the new emergency relief administration program in Indiana. The responsibility for administering and enforcing the requirements was placed with the state bureau of public health nursing.

The state board of education, meanwhile, has adopted new and higher regulations for school nurses which were formulated by a special committee of the State Nurses' Association. The state bureau of public health nursing collects the professional histories of all nurses applying for school nurses' licenses and assists the licensing division of the education department in deciding what nurses are eligible for permits or licenses.

## CRIPPLED CHILDREN'S DIVISION OF PUBLIC WELFARE DEPARTMENT

The Crippled Children's Division of the Department of Public Welfare of the State of Indiana started to function July 1, 1936. This is an entirely new department, created with the idea of furnishing services to crippled children in areas predominately rural, or those areas suffering from the greatest economic distress. This department will in no wise supplant any pre-existing service of this kind in the state. A state plan must first be formulated that will be acceptable to the Children's Bureau in Washington before any actual aid will be rendered. It will be the general idea of this plan to extend corrective treatment to indigent crippled children under sixteen years of age who heretofore have not been reached. The success of the plan necessarily will entail the whole-hearted support of the medical profession. After this service is an integral part of the Public Welfare Department, functioning of the plan will be facilitated by coordination with the State Board of Health through Dr. V. K. Harvey and the special liaison committee appointed by the Indiana State Medical Association.

The amount of money appropriated for this project is meager as compared to the vast number of children who must be cared for. However, Dr. O. W. Greer, the director of the new department, and an active member of the medical profession for more than twelve years, gives assurance that the policy of the department will be to reach the greatest possible number of crippled children with funds available.

A detailed account of the plan will be presented by Dr. Greer in a later issue of THE JOURNAL.

## DIPHTHERIA IN JUNE, 1936

In the month of June there were three deaths from diphtheria—one each from Allen, Howard, and Lake Counties. The ages are as follows: 1 year, 17 years, and 47 years. The man 47 years old in Lake County was a transient who had probably contracted the disease in another state.

This brings the number of cases for the year to 64, which is considerably higher than last year. The difference, however, is mainly due to the unusual number of deaths in January, 1936. Since January the number of deaths is approximately the same as for last year. At the end of June, which completes the first half of the year, the number of deaths is as a rule about 40 per cent of the number for the whole year. It is interesting to speculate that by that estimate we may expect about 160 deaths for the year. We are hoping that this estimate is much too high. There is a possibility that this will be so, inasmuch as the last two months have shown considerable decrease from the corresponding months of last year. All the counties reporting this month have already had deaths previously this year.

It is interesting to note again, as so many times pointed out, that none of the deaths for the last month was in the grade school group.

The distribution of the deaths by counties for the month of June and for the period of the year is given in the table below:

County	No. for Month June, 1936	No. for Year 1936
Allen	1	3
Benton	0	1
Brown	0	3
Cass	0	1
Clark	0	1
Delaware	0	1
Dubois	0	1
Elkhart	0	2
Grant	0	1
Greene	0	2
Howard	1	4
Jennings	0	1
Knox	0	1
Lake	1	4
Lawrence	0	2
Madison	0	4
Mariou	0	9
Martin	0	1
Monroe	0	1
Montgomery	0	3
Owen	0	1
Parke	0	2
Pike	0	1
Ripley	0	1
Saint Joseph	0	3
Tippecanoe	0	4
Vanderburgh	0	3
Vigo	0	1
Warren	0	1
Washington	0	1
Total	3	64

## SECRETARIES' COLUMN

Last month in this column I made the remark that the social aspects of medicine were not dead but only asleep. I believe the following clipping from the Terre Haute Tribune for July 3, 1936, upholds my contention. Be sure to digest the last paragraph.

### ALLOT FEDERAL FUNDS FOR STATE HEALTH WORK

WASHINGTON, July 3—(AP)—Federal aid for Indiana's public health service under the terms of the social security act will total \$217,781 for the fiscal year which began July 1. Indiana's share, allotted by the public health service, was made up of \$134,244 on a population basis, \$11,500 for special health problems; \$22,059 for the training of public health personnel, and \$49,978 based on the general financial needs of the state.

Half the allotments on a population basis and for special health problems, are to be matched by existing state health funds, and half by new state health funds.

The state program will be administered by the state health officer under the general supervision of the surgeon general of the United States public health service.

What has become of "state rights"? Public health under the Indiana Plan was very efficient. Will we be able to keep our Indiana plan? Remember the health of the people in Indiana is in the hands of the doctors in Indiana, where it rightfully belongs, and needs no supervision from any one or group outside the state.

\* \* \*

The program for the state meeting at South Bend will be the most interesting the State Association has ever held for the doctors. Make your hotel reservations now.

\* \* \*

If you have been working through this unusually hot weather—plan a vacation. A few weeks of vacation will restore all the vitality that "old man Sol" has taken away from you. Don't say you can't afford it—any doctor can afford a vacation. Remember it's the wear and tear of practicing medicine that knocks out the doctors between the ages of forty and fifty. Health is wealth!

## DEATHS

**GEORGE FRANK HOLLAND**, M.D., of Bloomington, died July fifteenth in an Indianapolis hospital after an illness of six weeks. Dr. Holland was sixty-four years old. He had served in the Spanish-American and World Wars as a medical officer in the navy. He graduated from the New York University College of Medicine, New York, in 1903, and was a member of the Monroe County Medical Society, the Indiana State Medical Association, a Fellow of the American Medical Association and a Fellow of the American College of Surgeons.

**MELVIN G. YOCUM**, M.D., of Mentone, died July seventh after a long illness. Dr. Yocum was seventy years of age. He had practiced medicine in Mentone for a period of forty-six years, and while he had retired from active practice because of illness, he had maintained his active interest in his medical society. Dr. Yocum was a member of the Kosciusko County Medical Society, the Indiana State Medical Association and the American Medical Association. He graduated from the Eclectic Medical College, of Cincinnati, Ohio, in 1890.

**DILLIS S. CONNER**, M.D., of Cannelton, died in an Evansville hospital, June twenty-fifth. Dr. Conner was fifty-five years of age. He graduated from the Louisville Medical College in 1905. He was a member of the Perry County Medical Society, the Indiana State Medical Association, and a Fellow of the American Medical Association. He was secretary of the Perry County Medical Society and also Perry County health officer.

**ROBERT F. PRICE**, M.D., of Terre Haute, died June twenty-seventh, aged seventy-seven years. Dr. Price was a member of the Vigo County Medical Society, the Indiana State Medical Association, and the American Medical Association. He graduated from the Medical College of Ohio, Cincinnati, in 1886.

**BERNAYS KENNEDY**, M.D., of Indianapolis, died June twenty-ninth. Dr. Kennedy was sixty-four years old. He was a major in the medical service during the World War, serving at Base Hospital 32. He had retired from practice several years ago because of ill health. Dr. Kennedy graduated from the Medical College of Indiana, Indianapolis, in 1898.

**CHARLES PARKS BACON**, M.D., retired physician and banker of Evansville, died June nineteenth, aged ninety-nine years. He was a member of the Vanderburgh County Medical Society, the Indiana State Medical Association, and a Fellow of the American Medical Association. Dr. Bacon graduated from the University of Pennsylvania School of Medicine, Philadelphia, in 1861.

## HOOSIER NOTES

Miss Phyllis Hensen, of Bedford, and Dr. Donald Colglazier, of Salem, were married July first at Bedford.

Miss Marjorie Wasmuth, of Roanoke, and Dr. C. E. Cook, of North Manchester, were married June twenty-seventh.

Mrs. Ruth E. Kain, of Indianapolis, and Dr. George McConnell, of Indianapolis, were married June fifteenth in Indianapolis.

Miss Rosalind English, daughter of Dr. and Mrs. R. A. English, of Clay City, and Dr. Carl M. Porter, of Jasonville, son of Dr. and Mrs. George Porter, of Linton, were married June twenty-seventh in Clay City.

Miss Mary Elizabeth Reid, of Bloomington, and Mr. Rudolf Myers, of Bloomington, were married in Indianapolis, June sixteenth. Mr. Myers, a medical school junior, is the son of Dr. B. D. Myers, dean of the Indiana University School of Medicine at Bloomington.

Dr. Warren V. Morris, of Aurora, has moved to Monticello where he has opened an office for the general practice of medicine.

Dr. Lynn W. Elston, of Fort Wayne, entertained about two hundred physicians from Fort Wayne at a venison dinner, June thirtieth.

Dr. B. A. Burkhardt, of Tipton, took a two weeks post-graduate course in Chicago in July.

Dr. and Mrs. Harold Nugen, of Auburn, have returned to their home after an absence of several months in New York where Dr. Nugen took post-graduate work at the New York Post-Graduate Medical School, and Mrs. Nugen attended Columbia University.

The first international conference on fever therapy, scheduled to be held in September of this year, has been postponed until March 30 to April 2, 1937. The conference is to be held at the College of Physicians and Surgeons, Columbia University, New York City.

Dr. W. E. Thompson, of Bethel, Ohio, celebrated his 101st birthday July sixth. He is considered to be the nation's oldest physician.

Dr. Ott Casey, who has been practicing in Clinton for a number of years, has gone to Florida where he plans to continue his practice.

Dr. Harold Hays, of New York City, is director-general of the American Medical Editors' and Authors' Association, succeeding Dr. H. Lyons Hunt, of New York, who has resigned.

The Oxford Retreat, at Oxford, Ohio, an advertiser in this JOURNAL for many years, has disposed of its property to Miami University and was discontinued as an institution after July 31st.

Miss Ruth Fink, of Indianapolis, and Dr. Earl W. Mericle, of Bargersville, were married in Indianapolis, June twenty-seventh. They are residing in Indianapolis.

Dr. Hugh A. Cowing, of Muncie, has been made president of the Muncie Y. M. C. A. to succeed the late Frank E. Ball. Dr. Cowing served as president of the Muncie Y. M. C. A. fifty-five years ago.

Approximately fifty of the 122 surviving members of the 1896 graduating class of Rush Medical College met in Michigan City, June twenty-fifth, as guests of Dr. F. R. Warren. Reunions of the group are held every ten years.

The American Board of Ophthalmology has announced removal of its executive offices to room 1002, Beaumont Medical Building, 3720 Washington Boulevard, St. Louis, Missouri. All applications and communications should be sent to the above address.

The fifteenth annual session of the American Congress of Physical Therapy will be held at the Waldorf-Astoria Hotel in New York City, September 7, 8, 9, 10, and 11. There will be no registration fee.

Miss Naney M. Grafton, of Muncie, and Dr. Donald M. Mattox, of Terre Haute, were married in Muncie, June eighteenth. Dr. and Mrs. Mattox will reside in Philadelphia where Dr. Mattox will serve his hospital internship.

The next meeting of the Eleventh District Medical Society will be held in Huntington, October 28, 1936. Dr. J. O. Arnold, of Temple University, Philadelphia, will be the principal speaker at the meeting. All members of the Indiana State Medical Association are invited to attend.

Dr. R. L. Kleindorfer and his family have moved to Evansville from Washington. Dr. Kleindorfer will maintain an office in Evansville and one in Washington where he will be in attendance two days of each week.

The Biological Photographic Associations will meet in Boston, September 24th-26th, for its sixth annual convention. Headquarters will be the Hotel Lenox. All photographers and scientists interested are invited to attend. Particulars may be obtained from the secretary, Miss Anne Shiras, Magee Hospital, University of Pittsburgh, Pittsburgh, Pa.

The ninth annual meeting of the Indiana Roentgen Society was held in Indianapolis, June seventh. Dr. John D. Camp, of Rochester, Minnesota, addressed the society, his subject being "X-Ray Findings in Spinal Cord Tumors." The following officers were elected for the coming year: President, E. M. Van Buskirk, Fort Wayne; president-elect, James N. Collins, Indianapolis; vice-president, H. H. Inlow, Shelbyville; secretary-treasurer, C. C. Taylor, Indianapolis.

#### AVAILABLE PROGRAMS FOR COUNTY MEDICAL SOCIETIES

The following motion picture 16 m.m. films have been purchased by the Indiana State Bureau of Maternal and Child Health of the Indiana Division of Public Health, from Doctor DeLee, of the Lying-In Hospital, of Chicago.

1. "The Physiology and Conduct of Normal Labor."
2. "The Forceps Operation."
3. "Complications of the Second Stage."
4. "Post Partum Hemorrhage"
5. "The Treatment of Asphyxia Neonatorum."
6. "The Prevention and Treatment of Eclampsia."

These films will be available for county medical society programs upon request. The Bureau will furnish the projector and an operator. The Bureau urges when such programs are requested that arrangements be made by the society to have an obstetrician present to discuss the film.

Final preparations are now being completed to compile a list of names, subjects, classification, and location of speakers who will be available to lecture before lay and medical audiences. It is expected to have this roster in the hands of the program chairmen of the county medical societies not later than the first of August, so that they may select speakers and subjects for their separate programs, or for programs of unofficial health organizations which may request health talks.

It is urged that all lay organizations submit their requests for speakers and health programs to the local county medical society, and that the secretaries of the societies sponsor the speaker and the

program. The Bureau of Maternal and Child Health is to function as an aid to the medical society in conducting such programs for lay organizations.

#### INVITATION TO INDIANA PHYSICIANS

A cordial invitation is extended to the members of the Indiana State Medical Association to attend the 71st annual meeting of the Michigan State Medical Society in Detroit, September 21 to 24, 1936. Headquarters will be the Book-Cadillac hotel. The scientific program will include as speakers Dr. Charles Gordon Heyd, of New York; Dr. Dean DeWitt Lewis, of Baltimore; Dr. C. S. O'Brien, of Iowa City; Dr. Fred Wise, of New York; Dr. George R. Herrmann, of Galveston, Texas; Dr. B. R. Kirklin, of Rochester, Minnesota; Dr. Emil Novak, of Baltimore; Dr. George W. Crile, of Cleveland; Dr. Isidore Friesner, of New York; and Dr. Albert L. Brown, of Cincinnati.

The invitation, signed by Dr. Grover C. Penberthy, president, and Dr. C. T. Ekelund, secretary, of the Michigan State Medical Society, assures a cordial welcome to all members of the Indiana State Medical Association to whom all courtesies and privileges will be extended.

In addition to the articles already enumerated, the following have been accepted by the Council on Pharmacy and Chemistry of the American Medical Association:

Campbell Products, Inc.

Kephrine

Kephrine Hydrochloride

Kephrine Hydrochloride Bandages

Kephrine Hydrochloride Gauze

Kephrine Hydrochloride Powder

Kephrine Hydrochloride Rectal Suppositories

Lederle Laboratories

Allergenic Extracts—Lederle

Sharp & Dohme, Inc.

Diphtheria Toxin for Schick Test Diluted Ready for Use—

Mulford

Diphtheria Toxin for Schick Test Control Diluted Ready for Use—Mulford

Insulin—Mulford, 100 units, 10 c.c.

The following articles have been accepted for inclusion in the List of Articles and Brands Accepted by the Council But Not Described in N. N. R. (New and Nonofficial Remedies, 1935, p. 445):

Lederle Laboratories, Inc.

Glycerinated Allergenic Extracts—Lederle

Truesdail Laboratories, Inc.

Golden State Agar Agar

#### INDIANA UNIVERSITY NEWS NOTES

Edmund Shea, of Indianapolis has been appointed chief record librarian of the Indiana University hospitals, according to the announcement of J. B. H. Martin, administrator of the I. U. medical center.

Mr. Shea was graduated in 1931 from the Indianapolis Cathedral High School. After completing one year of work at Butler University, he traveled extensively abroad. He received his A.B. degree in 1935 from the University College, Dublin, Ireland. During his attendance at this college, Mr. Shea studied international law under Professor Binchy, a prominent member of the Irish diplomatic service, and European history under Marcus O'Sullivan, former minister of education for the Irish Free State.

While in school in Indianapolis, Mr. Shea was a member of the literary, historic and Spanish societies and the Aero Club.

A valuable series of engraved copies of the anatomical drawings in the notebooks of Leonardo da Vinci that have been in the Royal Library at Windsor since the reign of Charles Second, have been presented to the Indiana University School of Medicine by Dr. George A. Collett, of Crawfordsville, according to Allan Hendricks, librarian of the medical center.

The prints Dr. Collett has given the I. U. medical school are the work of Francesco Bartolozzi, a member of the Royal Academy and the Historical Engraver to his Majesty, George the Third. They were executed in 1795, and were made by a combination of engraving and etching. The explanations adjoining the original drawings were written backward with the left hand, as all of da Vinci's notes were written, and must be read with the aid of a mirror.

It is supposed that the da Vinci notebooks were taken to England by the Earl of Arundel during the time when he was ambassador at the Court of Ferdinand the Second. They remained unappreciated in the Royal Library until the latter part of the eighteenth century, when they were brought to the attention of William Hunter, one of the most prominent physicians of his time, who recognized their value and gave them some degree of public recognition.

So far as known, the book on anatomy projected by da Vinci never was completed. "Apparently, he left no complete manuscript of any subject," Mr. Hendricks said. "He is popularly known only as the painter of 'Mona Lisa' and of 'The Last Supper,' but his amazingly versatile genius was also shown in sculpture, architecture, engineering, and in other branches of art and science. His fame as an anatomist has been of very late recognition."

**DON'T FORGET! . . .**

**South Bend — October 6, 7, & 8!**

Young doctors who received their doctor of medicine degrees last month from the Indiana University School of Medicine are beginning their internships this month in hospitals throughout the United States. A total of 76 of the new doctors have accepted interne appointments in Indiana hospitals, according to officials of the medical school.

Indianapolis hospitals will have 66 of the I. U. doctors, 10 will be stationed in hospitals in Evansville, South Bend, Muncie, Fort Wayne and Lafayette. Thirty-one will go to the following states for their year of interne work: Colorado, Missouri, California, Maryland, Louisiana, New Jersey, Wisconsin, Texas, Kentucky, Maryland, Ohio, South Carolina, Pennsylvania, Michigan, New York, Illinois, Connecticut and Minnesota. One of the recent graduates, Russell Rollins, of Indianapolis, already is practicing medicine in Tipton.

The Indianapolis City Hospital has granted internships to 30 of the members of this year's class of the I. U. medical school. Nineteen will be located at the Indiana University hospitals, Indianapolis, nine at the Methodist Hospital, Indianapolis, and eight at the St. Vincent's Hospital, Indianapolis.

Other Indiana hospitals which will have I. U. internes this year are as follows: Ball Memorial Hospital, Muncie, three; St. Elizabeth's Hospital, Lafayette, two; Epworth Hospital, South Bend, two; St. Joseph's Hospital, South Bend; Deaconess Hospital, Evansville, and St. Joseph's Hospital, Fort Wayne, one each.

The complete list is as follows:

City Hospital, Indianapolis: Raymond Adler, Evansville; Loren F. Ake, Indianapolis; Henry Brocksmith, Freelandville; Wallace Childs, Madison; Bernard Cohen, Indianapolis; Thomas Conley, Kokomo; Albert Donato, Bloomington; Norval Folkening, Indianapolis; John Hash, Bicknell; Joseph Haymond, Waldron; Ralph Hippenstein, North Manchester; John Humphreys, Bicknell; Sidney Kauffman, Indianapolis; Wendell C. Kelly, Indianapolis; Sam Klor, Indianapolis; James McFadden, Jr., Bedford; Jack McKittrick, Washington; Herbert McMahan, Anderson; Charles Maly, Indianapolis; Robert Myers, Chili; Robert Olyphant, Farmersburg; Norman Peacock, Indianapolis; Lewis Pollak, Indianapolis; Clarence Reich, Evansville; Clayton Rice, Indianapolis; John Rinne, Lapel; Jack Shields, Brownstown; Donald Spahr, Portland; Dan Stiver, Goshen; James White, Roachdale.

Indiana University Hospitals, Indianapolis: Frank Bard, Crothersville; J. Lynn Arbogast, Indianapolis; Douglas Barkley, Odon; Charles Bowman, Albion; Herbert Egbert, Indianapolis; John Ferry, Akron; Max Ganz, Marion; Richard Gery, Lafayette; Ralph Gettelfinger, Ramsey; Abraham Jackson, Paterson, N. J.; James Kirtley, Crawfordsville; Homer Life, Muncie; Orlando Meyer, Bluffton; Albert Ratcliffe, Newcastle; Donald

Rendel, Gary; Winfield Scott, Shelbyville; Louis Spolyar, Gary; John Van Nuys, Newcastle; Elmer Zweig, Fort Wayne.

Methodist Hospital, Indianapolis: Andrew Brenner, Winchester; William Cockrum, Evansville; Gilson Hild, Indianapolis; Gerald Shortz, La Crosse; John Thompson, Tyner; Herbert Wagner, Indianapolis; Joseph Walther, Rushville; Herman Watson, Evansville; Harvey White, Indianapolis.

St. Vincent's Hospital, Indianapolis: Ralph Beams, Spencerville; Chester C. Conway, McCordsville; John Davis, Anderson; Ross Griffith, Peru; Kenneth Higgins, Indianapolis; Everett Mason, Evansville; Francis Nusbaum, Cass; Charles O. Weddle, Lebanon.

Ball Memorial Hospital, Muncie: David Brown, Gary; Josephine Murphy, South Bend; Robert Turner, Farmland.

Epworth Hospital, South Bend: Edson C. Fish, Elkhart; Lester Renbarger, Marion.

St. Elizabeth Hospital, Lafayette: Ralph Kraft, Valparaiso, and James Openshaw, Terre Haute.

St. Joseph Hospital, South Bend: Ben Firestein, South Bend.

Deaconess Hospital, Evansville: L. Paul Hart, Evansville.

St. Joseph's Hospital, Fort Wayne: Robert Hollinger, Fort Wayne.

U. S. Marine Hospital, Baltimore, Maryland: William Crays, Indianapolis, and Merrill Goodwin, Selma.

Waterbury Hospital, Waterbury, Connecticut: George Scott, Scirleville, and V. Kenneth Stoeling, Freelandville.

Colorado General Hospital, Denver, Colorado: Terrence Billings, Valparaiso.

Homer G. Phillips Hospital, St. Louis, Missouri: Herschel Bundrant, Rushville.

St. Vincent's Hospital, Los Angeles, California: James Crawford, Indianapolis.

U. S. Marine Hospital, New Orleans, Louisiana: Sherman Denzler, Jeffersonville.

Barnert Memorial Hospital, Paterson, New Jersey: David Doktor, Paterson, New Jersey.

Columbia Hospital, Milwaukee, Wisconsin: Milton Erdel, Frankfort.

Dallas City and County Hospital, Dallas, Texas: Charles Fiel, Jr., Indianapolis.

St. Anthony's Hospital, Louisville, Kentucky: Simon Gold, Indianapolis.

St. Mary's Hospital, Madison, Wisconsin: Joseph Hanner, Bloomingdale, and Marion Roudebush, Noblesville.

City Hospital, Springfield, Ohio: Richard Johns, Bloomington.

Spartanburg General Hospital, Spartanburg, South Carolina: Craig S. Jones, Knox.

Philadelphia General Hospital, Philadelphia, Pennsylvania: Don Mattox, Terre Haute.

San Diego County General Hospital, San Diego, California: Charles Miller, Greensburg.

Lelia Y. Post Montgomery Hospital, Battle Creek,

Michigan: Charles Moehlenkamp, Evansville.  
Tacoma General Hospital, Tacoma, Washington:  
Richard Morton, Terre Haute.

Lutheran Hospital of Manhattan, New York  
City: Milton Omstead, Angola.

Jersey City Medical Center, Jersey City, New  
Jersey: Elroy Pasternack, Passaic, New Jersey.

Cincinnati General Hospital, Cincinnati, Ohio:  
Robert Price, Indianapolis.

St. Joseph's Hospital, Joliet, Illinois: Arthur  
Rosenthal and Irwin Rosenthal, East Chicago.

Lucas County Hospital, Toledo, Ohio: Burton  
Scheib, Indianapolis.

Station Hospital, Fort Sam Houston, San Antonio,  
Texas: James Seaman, Mishawaka.

St. Louis City Hospital No. 2, St. Louis, Missouri:  
William Smith, Indianapolis.

Ancker Hospital, St. Paul, Minnesota: Howard  
Sweet, Richmond.

Trinity Hospital, Brooklyn, New York: Milton  
Tepfer, Brooklyn, New York.

St. Luke's Hospital, Spokane, Washington: Forrest  
Tomlinson, Franklin.

## SOCIETIES — INSTITUTIONS

DEARBORN-OHIO COUNTY MEDICAL SOCIETY met at the Chatter-Box in Lawrenceburg, May twenty-eighth, for a dinner meeting. Dr. William Doughty, of Cincinnati, presented a paper on "X-ray and the General Practitioner." Fifteen attended the meeting.

Members of the Dearborn-Ohio county society met in Aurora, June twenty-fifth, at the office of Dr. C. W. Olcott. Discussion of the public welfare bill comprised the program.

\* \* \*

HENDRICKS COUNTY MEDICAL SOCIETY members met in the Brownsburg public library, June sixteenth. Principal speakers were Dr. A. N. Seudder and Dr. L. T. Folty. Ten members were present.

\* \* \*

JEFFERSON COUNTY MEDICAL SOCIETY met at the Hillside Hotel, Madison, June twenty-second. Dr. J. O. Ritchey, of Indianapolis, presented a paper on "Diseases of the Chest." The paper was illustrated with lantern slides shown by Dr. Clyde Culbertson.

\* \* \*

LAPORTE COUNTY MEDICAL SOCIETY members heard Dr. Beaumont S. Cornell, of Fort Wayne, present a paper on "Diseases of the Heart" at the June eighteenth meeting held in Michigan City.

\* \* \*

MARSHALL COUNTY MEDICAL SOCIETY met at the Country Club near Plymouth, June tenth. Dr. George S. Bond, of Indianapolis, talked on "Heart Sounds and Their Interpretation." This was the annual dinner meeting, with fifty-three present from the St. Joseph, Elkhart, Kosciusko, Stark, Fulton, and Miami counties. Golf was played in the afternoon, a chicken dinner was served in the evening, and Dr. Bond was the speaker at the dinner meeting.

\* \* \*

RUSH COUNTY MEDICAL SOCIETY members attended a dinner meeting in Rushville, May nineteenth. Dr. Bennett Kraft, of Indianapolis, was the principal speaker.

\* \* \*

SHELBY COUNTY MEDICAL SOCIETY members held a dinner meeting, July first, at Shelbyville. Speakers included Dr. Walter U. Kennedy, of Newcastle; Dr. Verne K. Harvey, of Indianapolis, and Dr. Howard Mettel, of Indianapolis.

WAYNE-UNION COUNTY MEDICAL SOCIETY members met in the public library at Liberty, June eleventh, to hear Dr. Henry B. Freiberg, of Cincinnati, discuss "Management of Prostatism." Attendance numbered thirty-three.

## THE INDIANA STATE MEDICAL ASSOCIATION EXECUTIVE COMMITTEE

June 20, 1936.

Roll call showed the following present: C. A. Nafe, M.D., chairman; H. H. Wheeler, M.D.; R. L. Senenich, M.D.; E. D. Clark, M.D.; O. O. Alexander, M.D.; A. F. Weyerbacher, M.D.; Albert Stump, attorney, and T. A. Hendricks, executive secretary.

Minutes of the meeting of May 3, 1936, approved.

The monthly reports of receipts and expenditures and reports of the budget for the Association committees and THE JOURNAL for May were made.

### Membership Report

Number of members June 20, 1936-----	2,735
Number of members June 20, 1935-----	2,686
Gain over last year-----	49
Number of members December 31, 1935-----	2,807

### Treasurer's Office

The following were appointed by the president as members of the 1936 auditing committee of the Association:

O. B. Norman, M.D., chairman:

W. F. Hughes, M.D.;

E. B. Rinker, M.D.

It will be the duty of this committee to check on the bonds and securities in the Association's safety deposit box.

### Legislative, Legal and Social Security Matters

(1) O. W. Greer, M.D., graduate of Indiana University School of Medicine in 1923, and a member in good standing in the State Association, has been appointed to head the medical program of the crippled children features of the Social Security Act.

(2) *List of hospitals and physicians doing orthopedic work.* This list was supplied by William D. Cutter, M.D., secretary of the Council on Medical Education and Hospitals of the American Medical Association, to serve as a guide in the establishment of approved orthopedic services to care for crippled children in compliance with the provisions of the Social Security Act.

(3) *Situation in Michigan.* Confidential letter received concerning the crippled children situation in Michigan whereby the bulk of the work is in the hands of a few selected orthopedists. The Committee hopes that such a situation can be avoided in Indiana.

(4) *Newly Created Division of Physical and Health Education.* Dr. Thurman B. Rice is head of this new division which is created by the Social Security Act. His assistant will be Frank Stafford of Thorntown. The general plan will be to attend teachers' institutes and training schools for the purpose of giving teachers help in health education procedures, and the objectives of the department will be to offer sound health teaching and stimulate discrimination in the use of health information and to correct misinformation and mistakes given over the radio.

(5) *Integration of Medical Profession.* Memorandum which was received from the American Medical Association relative to this subject was turned over to Albert Stump, attorney of the Association, for review and suggestion in regard to any use of this in Indiana.

(6) *Copeland Food and Drug Bill.* Upon the request of the American Medical Association telegrams were sent to Washington voicing opposition of the profession to this bill in its present form. (Bill killed before adjournment of Congress.)

(7) *Social Aspects of Sickness.* Bulletin upon this subject from Ralph H. Pino, M.D., chairman of Medical Economics Committee, Michigan State Medical Society, turned over to Dr. Senenich.

(8) *Doctor's Title Act.* This act, which was passed in Oregon, was brought to the attention of the Committee along with a letter from Dr. John R. Frank of Valparaiso. This

letter and the Oregon act were turned over to Albert Stump, attorney for the Association, for review and a report at the next meeting of the Committee.

(9) A synopsis of the administration of the Social Security Act in various states received from Minnesota.

#### Socialization of Medicine

(1) *Economy Situation.* Notice appeared in *The Indianapolis Times* of June 10 that the deadline for the renewal of contracts in the Economy (Indiana) medical cooperative had been set for June 15. According to the article the cooperative has only 69 members.

(2) *Increase in Hospital Facilities at Fort Harrison.* It was reported to the Committee that there had been an increase in hospital facilities at Fort Harrison to take care of the CCC workers who are brought to Fort Harrison from all over the state. The 225 beds will be increased by 90 beds making a total of 345 beds. This makes the Fort Harrison hospital next in size to the City and Methodist hospitals in Indianapolis.

(3) *Establishment of an Ear, Nose and Throat Clinic to Do Mass Medical Practice.* Informal request made for a ruling by the Executive Committee in regard to the rights of a clinic to advertise that it is established to do ear, nose and throat work at cut-rate prices. It was the opinion of the Executive Committee that the rules in regard to advertising are the same for a clinic as they are for any individual physician.

(4) *National Association of Manufacturers Films.* Letter received from National Association of Manufacturers offering to show films at the state meeting. The Committee instructed the secretary to write that the program for the state meeting was already filled.

#### Graduate Education

Authority given to Dr. E. D. Clark, president-elect of the Association, to appoint the Committee on Graduate Education now in order that it may start immediately to arrange for the 1936 program rather than waiting until the first of the year to begin arrangements for the graduate education meeting.

#### WPA and Indigent Sick

(1) An analysis of medical poor relief costs for Indiana, prepared by the Governor's Commission on Unemployment Relief, brought to the attention of the Committee.

(2) *List of Doctors Submitting Excessive Bills for Poor Relief Work.* Request was made of Wayne Coy, acting administrator of the Indiana Department of Public Welfare, that a list of physicians who are submitting excessive bills be sent to the Committee. Mr. Coy answered the letter saying that he could not send such a list as the bills are being submitted to the township trustees and it is from these township trustees that the Governor's Unemployment Relief Commission has received its information. Mr. Coy says further, "Mr. Charles Marshall of the department will be glad to discuss the general situation with you at any time, pointing out the difference in charge for the same service in various communities and other things which we have noted."

(3) Letter from the Philadelphia County Medical Society in regard to poor relief services turned over to Dr. Sensenich for study and review.

#### Group Hospitalization

(1) L. B. McCracken, manager of the Medical and Dental Service Bureau, appeared before the Committee and spoke of the difference between group hospitalization and hospital insurance. The Committee suggested that he prepare an article to appear soon in the Indiana State Medical JOURNAL explaining the difference between group hospitalization and hospital insurance as these terms are synonymous in the minds of most physicians.

(2) Error in American Medical Association report concerning organization of hospital service corporations in Indiana corrected by the American Medical Association.

(3) *Maternity Bond, Gary Methodist Hospital.* Copy of this bond brought to the attention of the Executive Committee and the general opinion was that this was the least objectionable of the many schemes for a prepayment plan to meet hospital bills as this specifically limits the services which are to be rendered under this bond.

#### State Board of Medical Registration and Examination

(1) *Physicians Acting as Optometrists.* Since the passage of the new optometry law which prohibits optometrists from advertising "Eye Examination Free" and the price of glasses, the chain optical stores of the state have in several instances obtained an osteopath or a physician to act as their manager and as there is no such limitation in the medical practice act these stores may advertise as they please. The Executive Committee felt that it was not able to take any action in regard to this unless the doctors so employed are members of the State Association.

(2) *Situation in Regard to Illegal Practitioners at Columbus, Indiana.* A report upon the investigation made by James D. Sturgis, deputy attorney general, brought to the attention of the Committee. The Committee hopes that Mr. Sturgis will receive the cooperation of the physicians of the Bartholomew County Medical Society.

#### Request for a Selected List of Physicians and Surgeons in the State

Request received from American Foundation Studies in Government through Dr. Burton D. Myers for a "list of twenty of the most competent physicians and surgeons in the state," brought to the attention of the Committee. The Committee suggested that a list of the county presidents and secretaries be sent to Dr. Myers as a representative list.

#### Immunization Campaign

An outline of the educational program in preventive medicine of The Medical Society of Milwaukee County was brought to the attention of the Committee.

#### Human Relations-Psychological Clinic

Announcement of the Human Relations-Psychological Clinic conducted by J. L. Rosenstein, Ph. D., of Butler University, brought to the attention of the Committee. According to the announcement, this clinic is for psychological consultation concerning personal, social and emotional maladjustments, domestic relations problems, child guidance, speech and educational difficulties. It was the opinion of the attorney of the Association that such a clinic does not violate the medical practice act.

#### Medical Education

A news item which states that Dr. Fred C. Zapffe, secretary of the Association of American Medical Colleges, criticizes so-called premedical courses, brought to the attention of the Committee.

#### Traffic Accident Committee

A communication has been sent by Dr. M. N. Hadley, chairman of the Traffic Accident Committee, to each county medical society asking that the program committee of each county society arrange for one meeting during the coming year to be devoted to the traffic accident problem.

#### Meeting of Committee Chairmen

The Committee suggested that such a meeting be held in Indianapolis about the middle of September following the publication of the committee reports in the convention number of THE JOURNAL.

#### University Hospital Patients

Request received from the president of the Third District Medical Society that the names of each patient, address, diagnosis, length of hospital stay, and the name of the referring physician, who had been sent to the University Hospitals from the Third District be supplied to the Third District. Request was forwarded to J. B. H. Martin, administrator, Indiana University Medical Center, and complied with.

#### The Journal

##### Advertising

(1) The Committee approved the removal of two professional cards from THE JOURNAL which are twelve months past due unless remittance is received before the August JOURNAL goes to press.

(2) Report made that advertising income has been in accordance with the budget estimates. The increase shown is not as great as last year, probably because a truer estimate has been made of future advertising income.

(3) *Finances.* Report made that according to the income and expenditures through May, 1936, THE JOURNAL will be able to stay within its budget for the year.

**Malpractice**

The attorney for the Association reported that the by-laws of the association contain nothing which would allow the Association to pay costs for the malpractice defense of any physician who is not a member of the Association at the time services were rendered for which he is being sued.

**BUREAU OF PUBLICITY**

MINUTES OF THE MEETING OF THE BUREAU OF PUBLICITY OF THE INDIANA STATE MEDICAL ASSOCIATION HELD AT 1711 NORTH CAPITOL AVENUE, INDIANAPOLIS, IN CONJUNCTION WITH THE OFFICERS AND THE MEDICAL PIONEER COMMITTEE OF THE WOMAN'S AUXILIARY TO THE INDIANA STATE MEDICAL ASSOCIATION

April 28, 1936.

Meeting called to order at 3:15 p. m.

Present: (Those marked with an asterisk were present.)

Members of the Pioneer Memorial Committee of the Indiana State Medical Association:

- \*W. N. Wishard, M.D., Indianapolis, chairman.†
- \*W. N. Thompson, M.D., Sullivan.
- \*E. Vernon Hahn, M.D., Indianapolis.†
- \*F. M. Gastineau, M.D., Indianapolis.†

† Members of Bureau of Publicity.

Officers of Woman's Auxiliary to the Indiana State Medical Association:

- \*Mrs. R. L. Compton, Richmond, president.
- Mrs. Marcus Ravidin, Evansville, president-elect.
- \*Mrs. F. B. Wishard, Anderson, first vice-president.
- Mrs. M. B. VanCleave, Terre Haute, second vice-president.
- Mrs. Wm. E. Tinney, Indianapolis, recording secretary.
- Mrs. J. C. Carter, Indianapolis, corresponding secretary.
- \*Mrs. Clarence L. Bock, Muncie, treasurer.

Members of Pioneer Memorial Committee of the Woman's Auxiliary to the Indiana State Medical Association:

- \*Mrs. O. G. Pfaff, Indianapolis, chairman.
- Mrs. W. N. Wishard, Indianapolis.
- Mrs. William S. Tomlin, Indianapolis.
- Mrs. David Ross, Indianapolis.
- \*Mrs. E. D. Clark, Indianapolis.
- \*Mrs. M. A. Austin, Anderson.
- Mrs. Joseph H. Weinstein, Terre Haute.
- \*Mrs. U. G. Poland, Muncie.
- Mrs. William R. Davidson, Evansville.
- \*Mrs. W. N. Thompson, guest.

The chairman explained that the purpose of the meeting was to devise ways and means of honoring the following four medical pioneers of Indiana:

*Mrs. Jane Todd Crawford*, who is buried near Sullivan, Indiana. In 1809 Dr. Ephriam McDowell performed the first operation in the world for ovarian tumor upon her.

*John Lambert Richmond*, M.D., buried at Covington, Indiana, who did the first cesarean section west of the Allegheny Mountains.

*John Stough Bobbs*, M.D., buried at Crown Hill, Indianapolis, who performed the first gallstone operation in the world.

*Mrs. Z. (Mary E.) Burnworth*, Dr. J. S. Bobbs' patient, who is buried at McCordsville, Indiana.

Dr. Thompson then repeated the story concerning the operation on Jane Todd Crawford by Dr. McDowell and presented each member of the committee with a picture of the tombstone over Jane Crawford's grave. The chairman of the committee then spoke of the other three pioneers who are to be memorialized. Following a general discussion of the subject (complete minutes of which were taken by a stenographer and will be sent at a later date to members of the committee), the president of the Auxiliary appointed Mrs. O. G. Pfaff as chairman of the committee for the Auxiliary, and the chairman of the Bureau of Publicity appointed Dr. W. N. Thompson and Dr. E. Vernon Hahn to represent the Bureau of Publicity on the general committee. Members of the subdivisions of the general committee are to be appointed by the president of the Auxiliary to collect all data and work out memorials for each of the four pioneers.

The burial places of each of the pioneers are definitely known except that of Dr. Richmond and a search for this grave is being made by Dr. A. L. Spinning, of Covington, secretary of the Fountain-Warren County Medical Society.

The following methods were suggested for memorializing these pioneers:

(1) Suitable bronze tablets to mark the actual burial places.

(2) A memorial tablet to be placed in the Indiana University School of Medicine, in or near the library, with suitable dedicatory exercises to accompany the unveiling and the occasion to be marked by a memorial issue of THE JOURNAL of the Indiana State Medical Association.

(3) Information concerning the medical pioneers to be presented to the Indiana Historical Commission in order that their names may be considered in the work that the Historical Commission and the Highway Commission are doing in placing markers upon state highways to commemorate historical spots in Indiana.

(4) A display in the scientific exhibit in regard to these four pioneers at the State Medical Association meeting at South Bend in charge of the Woman's Auxiliary. Pictures of the graves and pictures of the pioneers themselves would be suitable material for such display.

(5) A special issue of THE JOURNAL to commemorate the work of these pioneers. Articles in this special number of THE JOURNAL might include historical sketches together with technical articles on present-day problems in the surgery of the gall bladder and pelvis.

An investigation is to be made to verify the claim that has been made by the profession of Indiana that Dr. Richmond performed the first cesarean section west of the Allegheny Mountains and in the then United States in April, 1827. It has been stated that the Spaniards performed such operations long before that date in the territories that are now the southwestern states. Such claims must be authenticated before the priority claim for Dr. Richmond's operation can be superseded.

June 9, 1936.

Present: W. N. Wishard, M.D., chairman; E. Vernon Hahn, M.D., and T. A. Hendricks, executive secretary.

Minutes of the meeting of April 14 signed. Minutes of the meeting of April 21 approved for signature. Minutes of the meeting of April 28 corrected and approved for signature. The verbatim minutes of this meeting are to be rewritten and sent to the various members of the committee for correction before being made an official record.

Release, "The 'Ole Swimmin' Hole," approved for publication in Monday afternoon papers, June 15.

Correspondence received from the Tippecanoe County Historical Association which indicates that Jonathan Richmond's real name was John Lambert Richmond, according to the family and cemetery records.

Report on medical meeting:

May 7—Fountain-Warren County Medical Society, Perrysville, Indiana. "Gallstones and Infections of the Biliary Tract." (45 to 50 present.)

Requests for speakers:

June 9—Fayette-Franklin County Medical Society, Magnesia Springs, Indiana. Speaker obtained to talk on "Socialized Medicine."

June 23—Rotary Club, Seymour. Speaker requested to talk on "The Business Man's Heart." Speaker obtained.

Articles upon health in the May and June Indiana Parent-Teacher Bulletins approved by the Bureau.

Article which appeared in the April bulletin of the American Medical Association in regard to the decision of the Illinois courts which declared that it is illegal for a corporation to practice medicine in that state, brought to the attention of the Bureau.

Request received from a representative of the Indiana Hospital Association for the list of Indiana newspapers to which releases are sent. The secretary was instructed to send this list to this representative.

Request received from a physician at Stamford, Connecticut, to be placed upon the mailing list. Request granted by the Bureau.

Correspondence in regard to the rumored historical possessions of the late Doctor D. D. Van Osdol brought to the attention of the Bureau. The secretary was instructed to attempt to locate these possessions through further correspondence.

Letter received from the School of Medicine of the University of Pennsylvania concerning the articles of the late Doctor W. W. Keen in regard to vivisection brought to the attention of the Bureau. The Bureau instructed the secretary to obtain, if possible, the volume containing the papers of Doctor Keen upon this subject.

Letter received from the director of publicity of Indiana University concerning the notebook of Doctor Robert Cravens, an article concerning which appeared in THE JOURNAL, brought to the attention of the Bureau.

Bulletins issued by the Committee on Medical Trends of the Medical Society of the State of New York turned over to one member of the Bureau who was to analyze and make a report upon these bulletins at the next meeting of the Bureau.

Letter received from the chairman of the National Hospital Day Committee of the State of Indiana thanking the Bureau of Publicity for the release which was prepared and distributed to the papers upon national hospital day.

\* \* \*

June 15, 1936.

Present: W. W. Wishard, M.D., chairman; E. Vernon Hahn, M.D., and T. A. Hendricks, executive secretary.

Minutes of the meetings of April 21 and April 28 signed. Minutes of the meeting of June 9 approved for signature.

Release, "Prevent Hay Fever Now," approved for publication in Monday papers, June 22.

Report on medical meeting:

June 9—Fayette-Franklin County Medical Society, Magnolia Springs, Indiana. "Socialization of Medicine." (20 present.)

Request for speakers:

June 16—Second District Medical Society, Washington, Indiana. Speakers obtained.

Report upon bulletins issued by the Public Relations Bureau and the Committee on Medical Trends of the Medical Society of the State of New York made by a member of the Bureau. The Bureau approved the report upon this material which is concluded with the following paragraph:

"As this reviewer sees this series of bulletins, they lead up to a frank espousal of newspaper publicity of individual technical opinions of physicians by the circuitous route of advocating defense against the onslaught of socialized medicine. If the attitude suggested by the final bulletin were to be widely adopted, there would be an end to the professional reserve which has traditionally been enjoined upon individual doctors and which has protected all of us against the impulse to advance ourselves by publicity rather than by work. The whole trend of this series of bulletins, in my opinion, is disingenuous and unflattering to the medical profession."

The Bureau recommended that the bulletins from the Medical Society of the State of New York and also the criticism be brought to the attention of the editor of THE JOURNAL of the State Association with the suggestion that an editorial be prepared in regard to this subject.

Request received from a commercial company to republish Doctor Wynn's "Ten Commandments of Medical Ethics." As this company had received the approval of the American Medical Association and of Doctor Wynn's family to use these "Commandments" the Bureau gave its sanction.

Copies of the special medical sections of the Wichita *Eagle* and the Wichita *Sunday Beacon* brought to the attention of the Bureau of Publicity. These sections were published by the Wichita papers under the supervision of the Sedgwick County (Kansas) Medical Society. The executive secretary of the Sedgwick County Medical Society writes as follows in regard to the purpose behind these special editions:

"Praise from members of the lay public and physicians alike has been gratifying. We feel we have developed an effective method to counteract the ballyhoo of quacks and patent medicine vendors who advertise their wares through the newspaper. The ordinary American citizen forms prac-

tically all his opinions from what he reads in the newspaper. It seems logical that the medical profession can present facts about the ethics and achievements of the profession most successfully through the medium of the daily newspaper."

Editorial from the Detroit *Medical News* in regard to health conditions in England at the time of Charles Dickens in comparison with modern times, brought to the attention of the Bureau. The Bureau felt if approval could be received from the Detroit *Medical News*, that some of this might be used in a publicity article.

\* \* \*

June 23, 1936.

Present: W. N. Wishard, M.D., chairman; E. Vernon Hahn, M.D.; F. M. Gastineau, M. D., and T. A. Hendricks, executive secretary.

The Bureau approved the corrected minutes of the April 28 meeting of the Pioneer Memorial Committee and instructed the secretary to have copies made and sent to all members of the committee with the explanation that the original copy contained some errors and the corrected copy is official.

The release, "July Fourth Fear," approved for publication in Wednesday papers, July 1.

The Bureau suggested that releases prepared for its approval be in the hands of the Bureau the day before each meeting.

Suggestion made that the Bureau issue a release on or about August 15 regarding the co-seasonal treatment of hay fever.

Letter received from the publicity representative of the Indiana Hospital Association thanking the Bureau for its cooperation in providing list of Indiana newspapers which are to receive hospital news bulletins. As the representative of the Hospital Association asked for suggestions from the Bureau, the secretary was instructed to write him that the Bureau suggests that all releases be impersonal and that they should contain no personal puffery as they are intended to be informative. The Bureau further suggests that the Hospital Association follow the same rules regarding publicity that are followed by the Bureau of the Indiana State Medical Association.

Notice received from the chairman of the Pioneer Memorial Committee of the Woman's Auxiliary to the Indiana State Medical Association that the trip to Lafayette and Sullivan to visit the graves of medical pioneers is planned for an early date. The members of the Bureau are invited to make this trip.

The secretary was instructed to purchase, if possible, the book entitled, "Animal Experimentation and Medical Progress," by W. W. Keen, M.D., published by the Houghton Mifflin Company, Boston and New York, The Riverside Press, Cambridge, in 1914.

## SECOND DISTRICT MEDICAL ASSOCIATION

The Second District Medical Association, composed of Daviess, Martin, Greene, Knox, Monroe, Owen and Sullivan Counties, met at Washington, Indiana, on Tuesday, June 16th, at 2:00 p. m. This was the twenty-sixth annual meeting.

Dr. H. B. Mettel, of the State Board of Health, gave a discourse on "Maternal and Child Health" as a partial explanation of the new Social Security Law. This was quite in order. Dr. R. H. Moser, of Indianapolis, gave a very instructive and interesting paper on a resume of the newer modes of "Therapy of Peptic Ulcer." During the business session following the afternoon program, it was voted by the society to reorganize on a more solid basis with the view of obtaining better attendance.

At 6 p. m. a fine dinner was served in St. Mary's Dining Room. This was voted by the society as being one of the best dinners ever offered to the society.

During the evening session, which began at 7:30 o'clock, we were favored by a paper on "Thyroid Heart Disease," by Dr. R. M. Moore, of Indianapolis. This was very favorably received by those in attendance. Continuing Dr. Moore's line of thought Dr. Goethe Link, of Indianapolis, read a paper

on "Thyroid Surgery" emphasizing particularly the diagnosis of thyroid disease when surgery should be attempted. Dr. Link is always an interesting speaker. Fifty members in attendance.

The meeting closed at 9:30 p. m. Dr. Wadsworth was re-elected councilor. Place of next meeting, Greene Country.

DR. W. O. MCKITTRICK, President.  
DR. J. S. BROWN, Secretary.

## BOOKS

### BOOKS RECEIVED

**DISABILITY EVALUATION.** Principles of Treatment of Compensable Injuries. By Earl D. McBride, B.S., M.D., F.A.C.S., Assistant Professor in Orthopedic Surgery, University of Oklahoma School of Medicine. 623 pages with 374 illustrations. Cloth. Price \$8.00. J. B. Lippincott Company, Philadelphia and London, 1936.

\* \* \*

**HEART DISEASE AND TUBERCULOSIS.** Effects, Including Methods of Diaphragmatic and Costal Respiration, to Lessen Their Prevalence. By S. Adolphus Knopf, M.D., New York. 108 pages. Cloth. Price \$1.25. The Livingston Press, Columbia County, New York, 1936.

\* \* \*

**PRINCIPLES AND PRACTICE OF RECREATIONAL THERAPY FOR THE MENTALLY ILL.** By John Eisele Davis, in collaboration with William Rush Dunton, Jr., instructor in psychiatry, The Johns Hopkins University. 206 pages. Cloth. Price \$3.00. A. S. Barnes and Company, 67 W. 44th St., New York, 1936.

\* \* \*

**WHY BRING THAT UP?** A Guide to and from Seasickness. By Dr. J. F. Montague, editor of Health Digest. 130 pages. Cloth. The Home Health Library, Inc., New York, 1936.

\* \* \*

**THE EYE AND ITS DISEASES.** By 82 International Authorities. Edited by Conrad Berens, M.D., ophthalmic surgeon, pathologist and director of research, New York Eye and Ear Infirmary. 1254 pages with 436 illustrations, some in colors. Cloth. Price \$12.00. W. B. Saunders Company, Philadelphia and London, 1936.

\* \* \*

**ENDOCRINOLOGY IN MODERN PRACTICE.** By William Wolf, M.D., M.S., Ph.D. 1018 pages with 252 illustrations. Cloth. Price \$10.00. Philadelphia and London, W. B. Saunders Company, 1936.

\* \* \*

**MINOR SURGERY.** By Frederick Christopher, S.B., M.D., F.A.C.S., Associate Professor of Surgery at the Northwestern University Medical School, Chicago; chief surgeon at the Evanston (Ill.) Hospital. Foreword by Allen B. Kanavel, M.D. Third edition, reset. 1030 pages with 709 illustrations. Cloth. Price \$10.00. W. B. Saunders Company, Philadelphia and London, 1936.

\* \* \*

**CERTIFIED MILK.** Proceedings of the American Association of Medical Milk Commissions, Inc., in conjunction with the Certified Milk Producers' Association of America, Inc.

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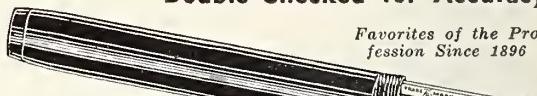
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### CARCINOMA OF THE STOMACH ITS PATHOLOGY AND DIAGNOSIS\*

DR. GATEWOOD†  
Chicago

Although Hippocrates (460-370 B. C.) described cancer as a true neoplasm and Celsus (25 B. C.-50 A. D.) recognized some visceral forms of cancer, cancer of the stomach was not clearly appreciated until after the revival of medicine in the sixteenth century. Indeed, the first real description of carcinoma of the stomach as a pathological entity did not come until after the dawn of the nineteenth century. It is interesting to note that exactly a century ago, Cruveilhier (1829-1835) and Carswell (1838) both admirably described from the anatomical point of view the various types of gastric cancer.

After Johannes Muller, in 1838, applied the microscope to the study and classification of tumors, Virchow in his epoch-making microscopic pathology, published in 1858, convinced the world that cancer consisted of an abnormal growth of cells: "Omnia cellula e cellula."

Until the publication in 1867 of Waldeyer's views that cancer cells developed from the epithelial cells of the gastric tubules, it was generally accepted that gastric cancer originated in the submucous coat of the stomach, and that the cells in the cancerous area were derived from connective tissue cells. The impetus to the study of cancer given by the discovery of the unbridled growth of the epithelial cell has gathered momentum with the passing of the years, nor is this to be wondered at when we realize that cancer ranks second in the causes of death, exceeded only by cardio-vascular disease. (Haudek)

\* This paper was given in a modified form with numerous illustrations at Postgraduate Course of the Indiana State Medical Association and the Indiana University School of Medicine, in Indianapolis, on April 8, 1936.

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Gastric carcinoma is the most common cancer of the body, accounting for thirty-five to forty per cent of cancer deaths and apparently it is on the increase. (Fig. 1.)

The fatalistic attitude common among physicians and patients led me to make a survey of a group of 500 consecutive cases of gastric cancer admitted to Presbyterian Hospital, in the hope of discovering some remedial shortcomings and of improving our future results. The results of this survey, which are in close agreement with those of other clinics, such as the Mayo,<sup>1</sup> the Massachusetts General,<sup>2</sup> Lahey's Clinic,<sup>3</sup> and the Seraphimer Hospital in Stockholm,<sup>4</sup> will furnish the basis of this discussion.

#### ETIOLOGY OF GASTRIC CANCER

As shown in our series, most cancers occur between 50 and 70 although the number under 30 is definitely on the increase. While the incidence after 70 seems to decrease rapidly, it is difficult to say whether this is not more apparent than real when considered with life expectancy in general in advanced age. (Fig. 2.)

From the standpoint of sex our figures reveal 67 per cent were male, a somewhat higher proportion than most postmortem statistics, but lower than Balfour's (79 per cent) or those of most surgeons. In fact, it seems that the increase in frequency is in men rather than in women.

How much of a factor heredity plays in cancer of the human stomach can only be determined by accurate histories covering a few hundred years. However, one cannot escape the conviction that certain families have an increased susceptibility to malignant disease as shown by Little's<sup>5</sup> analysis

<sup>1</sup> Balfour, D., and Hargis, E. H.: Cancer of the Stomach, *Amer. J. Med. Sci.*, 173:773, 1927.

<sup>2</sup> Davis, L., and Parsons, L.: Carcinoma of the Stomach. Report read at meeting of Society of Clinical Surgery, November 14, 1931.

<sup>3</sup> Lahey, F. H., and Jordan, S. M.: Cancer of the Stomach, *New England Jour. of Med.*, 210:59, January 11, 1934.

<sup>4</sup> Persson, M.: Final Results of Gastric Resections for Cancer, *Ann. Surg.*, 86:321, 1927.

<sup>5</sup> Little, C. C.: The Role of Heredity in Determining the Incidence and Growth of Cancer, *Am. J. Cancer*, 15:2780, 1931.

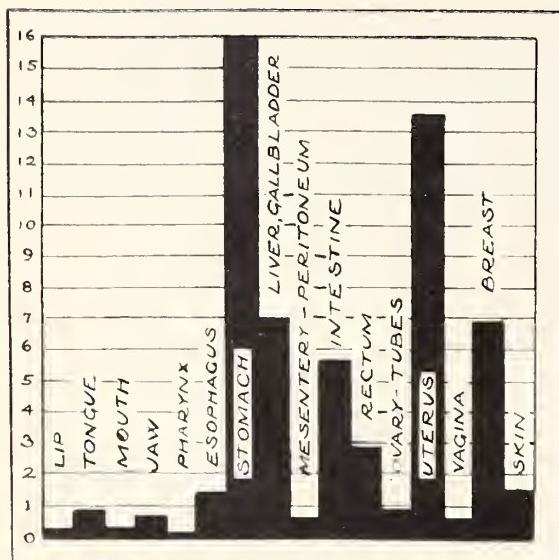


Fig. 1. Death rate per 100,000 according to statistics of the Metropolitan Life Insurance Company.

of the family histories at the Eugenics Record Office of the Carnegie Institution. In our own series, an immediate family history was obtained in 12 per cent of patients, and it probably would have been somewhat higher were it not for the reluctance of many physicians to obtain a careful family history in outspoken cancer cases. Three brothers in one family died of cancer of the stomach. One patient's father died of carcinoma of the pylorus while his mother had carcinoma of the esophagus.

There is undoubtedly a racial variation in cancer frequency which cannot be entirely explained on a dietary basis, differences in life span, or lack of accurate medical diagnosis. For example, cancer of the stomach is about twice as common in Holland (55 per cent) as it is in England (22 per cent), although the total cancer mortality of the two countries is about the same<sup>6</sup>.

While the effect of certain irritants on experimental cancer production is well established, one must be careful in drawing conclusions about the sort of irritant responsible for gastric malignancy in the human race. Chronic gastritis is so uncommon that it is difficult to determine its exact effect although, as shown by Borrmann,<sup>7</sup> cicatrization undoubtedly plays a role. In our own series, we were able to demonstrate carcinoma on an ulcer base in 6 per cent of the resections,<sup>8</sup> and I am inclined to agree with such men as Karsner, Hartmann,<sup>9</sup> and

<sup>6</sup> Cramer, W.: The Prevention of Cancer, *Lancet*, 1:1, No. 1, 1934.

<sup>7</sup> Borrmann, R.: Handbuch der Speziellen Pathologischen Anatomie und Histologie, Henke und Lubarsch, Vol. 4, p. 812, Julius Springer, Berlin, 1926.

<sup>8</sup> Gatewood: Carcinoma of the Stomach—An Analytical Survey, *Ann. Surg.*, 96:588, 1932.

<sup>9</sup> Hartmann, H.: L'ulcero-cancer de l'estomac est-il fréquent? *Bull. et mem. Soc. Nat. de Chir.*, 54:263, 423, 455, 1928.

Bueermann,<sup>10</sup> who believe that cancer occurs on an ulcer base in but 2 to 5 per cent of cases. The majority of so-called ulcer-cancers are cancer-ulcerations in which microscopically the base is definitely malignant although the gross picture may be very confusing. Polyps and polyposis are undoubtedly etiologic factors, but are of infrequent occurrence.

#### MORBID ANATOMY

Although the location of the majority of gastric cancers does not correspond to that of ulcer, both may occur in almost any part of the stomach wall. As shown in the composite diagram (Fig. 3) based on the accumulated statistics from 13 clinics and covering 6,684 cases, roughly 3/5 of the lesions begin near the pylorus, 1/5 at the cardia or along the lesser curvature, and the rest in the large remaining portion of the stomach, the fundus and greater curvature being seldom involved. Theoretically, at least, over 3/5 of gastric carcinomas should be resectable if the diagnosis could be made sufficiently early. As is usual in any organ which has developed highly specialized and varied cells from a single embryologic prototype, there are many varieties of gastric cancer and nearly every pathologist has introduced his own classification. Borrmann (Henke & Lubarsch) gives seven different microscopic classifications of the varieties of gastric carcinoma.

The following simple classification has been followed in the study of our cases: Gross—

1. Medullary—or soft cancer which soon involves all coats and which ulcerates early. These frequently form the large cauliflower growths and are always accompanied by bleeding. The microscopic picture varies greatly, although most of these tumors are of the adeno type.

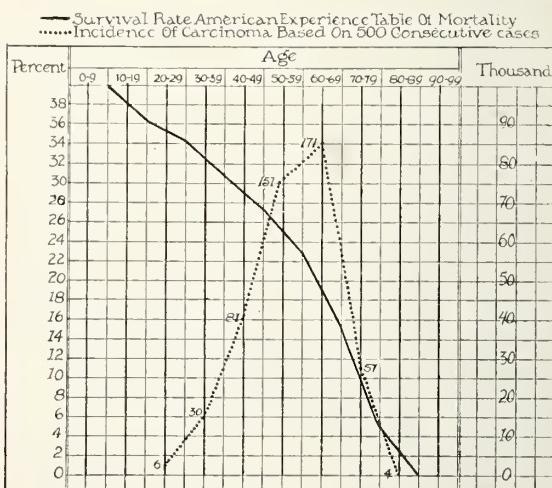


Fig. 2. shows a comparison of the incidence of carcinoma as compared with the survival rate of the American experience table of mortality.

<sup>10</sup> Bueermann, W. H.: A Clinical and Pathological Study of the Carcinomatous Gastric Ulcer, *West. J. Surg., Obst. & Gynec.*, 38:680, 1930 et seq.

2. Scirrhous—or hard cancer in which there is an abundance of stroma and a limited amount of alveolar substance. These cause great deformity and are often the cause of high grade pyloric stenosis.

3. Linitis plastica, or leather-bottle stomach which I have often referred to as scirrhous carried to the *nth* degree. This is the most slowly growing gastric malignancy. It often does not ulcerate or bleed, and usually sneaks up on its unsuspecting victim so insidiously that it is inoperable at the time it is discovered. For example:

Case No. 265365.—Mr. H. G., age 64. Complaints: Pain in epigastrium; nausea; fullness; rumbling in the bowel and abdominal distress; loss of weight—over 20 pounds. Symptoms began six weeks previously as hunger distress, not relieved by food, but somewhat relieved by belching. Family history—negative. Physical examination—some abdominal tenderness. No masses. Laboratory—Blood: R. B. C. 5,100,000; W. B. C. 7,500; Hb. 77%. Ewald: HCl, 0, Total 12; chemical blood ++. Stools: chemical blood +. X-ray—Stomach markedly narrowed and fore-shortened. Duodenal cap full. Inoperable. (Fig. 4.)

Occasionally, a patient with linitis plastica will live five or six years, casting serious doubt upon the diagnosis. This is the type which has confused the pathologist for years, often being mistaken for diffuse gastritis until careful microscopic search revealed the true pathology. It presents marked diagnostic difficulties to the roentgenologist on account of its similarity to syphilis.

4. Carcinoma on ulcer base—2 to 5 per cent. It is unnecessary to go into the argument about the frequency with which carcinoma develops on an old



Fig. 4. Mr. H. G. x-ray showing stomach markedly narrowed and fore-shortened. Duodenal cap full. Inoperable.

ulcer. I will refer you to the references already mentioned.

5. Colloid carcinoma—first recognized by Otto in 1816—forms a group of about 5 per cent of gastric cancers. It was formerly considered to be an unusually benign type, but Walton<sup>11</sup> feels that this is a mistake. The alveoli filled with translucent colloid areas are visible to the naked eye. Metastases may lose their gelatinous structure and appear as pure adenocarcinomas.

6. Metastatic carcinoma—frequently primary in the breast or ovary with secondary stomach involvement.

Microscopically, these gross gastric neoplasms may be grouped as:

1. Glandular
  - a. Adenocarcinoma—with structure resembling gastric tubules.
  - b. Papillary.
  - c. Solid columnar celled.
  - d. Colloid. This variety is one of the frequent causes of ascites outranking, according to Kaufmann,<sup>12</sup> the gall-bladder and the colon as the source of colloid carcinoma of the peritoneum.

2. Simplex (medullary and diffuse)—with epithelial cells taking on little or no structure and with many cells packed between little stroma. The cells are so atypical that the cancer is sometimes mistaken for sarcoma. Ulceration is the rule and hemorrhage follows. Perforation occasionally occurs while metastases are early and widespread.

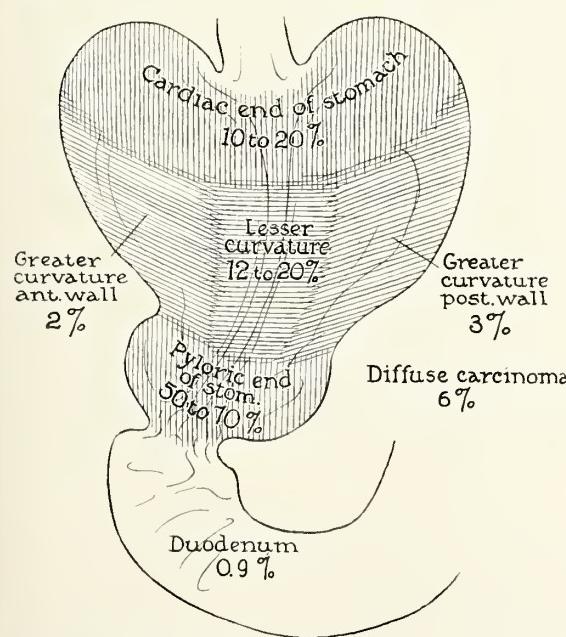


Fig. 3. Composite diagram of the location of carcinoma. Compiled from 6,684 cases.

<sup>11</sup> Walton, A. J.: Carcinoma of the Stomach, *Brit. Med. Jour.*, 1:1939, 1929.

<sup>12</sup> Kaufmann, E.: Neoplastic Disease, Ewing, p. 669, 3d Ed., W. B. Saunders Co., 1931.

3. Scirrhus—the fibrosing type of carcinoma in which the stroma predominates over the cancer cell, frequently involves the entire pyloric end of the stomach and while slowly growing, metastases are the rule and we have no patient with scirrhus cancer living more than seven years after resection.

4. Linitis plastica—In some of these cases, the diagnosis of chronic gastritis has only been corrected by microscopic studies of peritoneal metastases. The individual carcinoma cells may be so locked in fibrous tissue that only mucus will remain.

5. Squamous cell—found at the cardia. These originate in the esophagus or from misplaced esophageal epithelium in the cardiac end of the stomach. (We have no example of this type in our series.)

6. Metastatic carcinoma—the microscopic picture naturally varies with that of the primary neoplasm.

Combinations of the above groups often occur so that one part of a gastric cancer will appear as typical adenocarcinoma while other sections are almost entirely scirrhus.

Metastases from a gastric carcinoma occur by direct extension, by implantation, by lymphatic extension, and by the portal vein into the blood stream. The importance of lymphatic extensions, as emphasized by Verbruggen<sup>13</sup> must be borne in mind by the surgeon who hopes to cure his patient by resection.

Perforation, according to Ewing, occurs in 3 per cent of cases. Gastrocolic, or gastro-cutaneous fistula or walled-off abscess occurs much more frequently than general peritonitis from an acute perforation.

#### ANALYSIS OF HISTORIES

According to our records, the duration of symptoms varied from a few days to "many years." The exact date of onset was indefinite in some cases as patients frequently could not differentiate between chronic bowel disturbances and the onset of their immediate symptoms. Where sufficient data were given, the delay between the onset of symptoms and the time the patient consulted a physician averaged 5.3 months (sixty reporting shortly after the onset). Ten patients admitted having been treated over considerable periods of time by chiropractors or cultists. It was possible to ascertain from approximately one-third of our histories how much time had elapsed between the time the patient first consulted a doctor and the date of operation. The average was a little more than eight months! Goldie,<sup>14</sup> in a similar analysis of 137 cases found that eight months elapsed between the date of the first symptoms and the date of diagnosis, four and one-half months of which

delay was attributable to the patient and three and one-half directly to the delay of the physicians.

We have found two types of history, the short and the long. The short varied from a few days to as much as two years, in patients who previously could "eat nails." About ten per cent of the patients gave a very good ulcer history preceding the present complaint by many years. One of these patients had a gastroenterostomy done by Dr. Bevan 12 years before. At operation an old healed ulcer was found remote from the site of the cancer. In general, the history in gastric cancer is much more indefinite and bizarre in pattern than that of ulcer, and the duration is much shorter.

#### SYMPTOMS

The symptom complex usually given in text books of loss of appetite, weight and strength is more commonly found in late lesions than in early ones. While these patients frequently have been treated for peptic ulcer, the histories are never altogether typical. The most common symptom according to our histories is pain, which varies from mild epigastric distress to acute, severe pain. This symptom was given by more than three-fourths of our patients. Next in frequency is loss of weight although few mention this as the first symptom. This weight loss varied from 5 to 115 pounds, the average being more marked in the group in which only exploratory operation was done (32 pounds) than in the group where resection could be done. Only four patients in the entire series reported a gain in weight. The next most common symptoms in order of frequency were vomiting, weakness, loss of appetite, fullness, "indigestion," etc., as shown in Table I.

TABLE I  
Order of Complaints

Symptom	1	2	3	4	5	Totals*
Pain	212	41	25	21	5	302
Loss of weight	17	89	89	44	21	282
Vomiting	22	65	34	35	15	177
Weakness	34	35	42	30	18	165
Loss of appetite	25	32	37	14	6	123
Fullness	37	27	14	6	3	90
Difficulty in swallowing	14	7	7	4	1	33
Knowledge of tumor mass	6	6	3	4	5	27

\* The figures in the five columns represent the order in which the patients gave the more common symptoms. The total numbers of ALL patients mentioning the symptoms are listed in the last column. Naturally, many patients had more than five complaints.

Anorexia is sometimes marked before pain, vomiting or other evidence of gastric indigestion are noted, and a capricious appetite with distastes for ordinary foods is not uncommon. Loss of appetite which is much more characteristic of cancer than ulcer, may be the result of bleeding, of obstruction or of pain due to intragastric pressure. Pauchet<sup>15</sup> in a plea for earlier diagnosis calls attention to "crises" in the history of some patients

<sup>13</sup> Verbruggen, A.: Intramural Extension of Gastric Carcinoma, *Arch. Surg.*, 28:566-579, 1934.

<sup>14</sup> Goldie, W.: An Analysis of One Hundred and Thirty-seven Cases of Gastric Carcinoma as to the Earliest Symptoms, *Can. Med. Assn. Jour.*, 20:486, 1929.

<sup>15</sup> Pauchet, V.: Plea for Earlier Diagnosis of Gastric Cancer, *Bull et mem. Soc. de med. de Paris*, pp. 379-384, May 28, 1932.

when minor symptoms suddenly become severe. Most of these cases have become inoperable. One must also remember that there is a small group of patients suffering from gastric carcinoma who have no stomach symptoms. The very multiplicity and vagueness of the symptoms should put the physician on the alert whenever a patient past 35 complains of any indefinite upper abdominal distress of more than a few days' duration.

#### EXAMINATION

**Physical Examination**—On examination, emaciation was the most common finding although it was entirely absent in 30 per cent of the resected cases. A definite palpable tumor mass was found in approximately one-half of the unoperated cases and in two-thirds of the patients who were either inoperable or had palliative operations. It is my impression that a tumor might have been found in a higher percentage of cases had more of the examinations been made under the fluoroscope, a suspicious sense of resistance often becoming a definite mass when felt in conjunction with a visible defect. Ascites was found in 30 cases and reported as probable in four others. Virchow's glands were noted in 8 cases (2 per cent), and a palpable rectal mass (Blumer's shelf) six times. Obviously, the presence of Virchow's or of rectal glands excludes the possibility of radical resection. Although edema and ascites are usually late, they may result from anemia and not from implantation metastases, as shown in one of our patients who has been well for five years after resection.

The blood examination revealed nothing of note except a varying degree of secondary anemia, 12 per cent having 40 per cent Hb. (Dare) or less and the average being 64 per cent. We still have no specific cancer test and those occasionally used in this series have been discarded as worthless.

The laboratory findings revealed occult blood in the stools in 95 per cent of all cases, and in the stomach contents in approximately the same percentage of the cases in which examinations were made. The foul, brownish material frequently aspirated is so typical that further analysis is almost superfluous. Von der Vedden, working in Kussmahl's Clinic, in 1879, first reported the absence of free HCl in gastric cancer and most texts cite this finding as a differential diagnostic point. However, approximately 30 per cent of our cases had free HCl as is shown in Table II, and one must not be influenced too greatly by its presence.

TABLE II  
Acidity in Stomach Contents

Type of Operation	Free Acid Present	No Free Acid Avid	Percentage of Cases with Free HCl
Resections -----	16	35	31.4
Gastroenterostomy -----	27	45	27.5
Explorations -----	8	31	20.5
Unoperated -----	41	99	29.3

Lactic acid was reported as negative in seven of the achlorhydrias, but according to Dodds and Robertson,<sup>16</sup> this was probably due to inaccurate examination, as they feel that lactic acid is almost always present in the absence of free hydrochloric acid and show that it is not caused by tumor formation. The total acidity in cancer achlorhydria is usually much higher than in achylia gastrica, 30-40 as compared with 5-10 or 12. Pollard and Bloomfield<sup>17</sup> believe that the presence or absence of free hydrochloric acid depends upon the amount of gastritis present, bearing out the suggestion of Mathieu, made in 1889. We have made microscopic examinations of remote portions of all of our resected stomachs and have found a certain amount of gastritis almost invariably present. The degree did not seem to bear any relationship to the presence or absence of hydrochloric acid. Comparing cases with obstruction with those which had none, retention of gastric contents does not seem to influence the acidity. Although the presence of pus- and tumor-cells is of diagnostic importance and they should always be searched for as well as long bacilli, their absence is of no diagnostic value. Mucus is usually present in more than normal amounts.

The importance of x-ray examination cannot be over-emphasized, the accuracy of diagnosis in all except the occasional ulcer-carcinoma being nearly 100 per cent. The ability of the x-ray department to determine operability is not quite so good and whenever there is a question of doubt, the patient should be given the benefit of exploration. At least five resections were done on cases thought to be non-resectable by the roentgenologist.

Differential diagnosis should depend upon all the evidence obtainable, although it can be made with certainty in too many cases by any one of the factors I have enumerated. Of the benign lesions gastric ulcer, syphilis and polyps are the most common. Polyps may be multiple and still give no clinical symptoms. Occasionally when pedunculated they may produce ball-valve like obstruction. Sometimes they produce serious hemorrhage without other symptoms. The x-ray usually makes the diagnosis in this type of case.

Syphilis is an uncommon lesion which may produce very extensive defects. It is almost always accompanied by achlorhydria and the clinical picture can so closely simulate carcinoma that a pre-operative or even an operative diagnosis may be impossible.

Sarcoma is a rare condition which gives a bizarre picture, at times not unlike carcinoma.

<sup>16</sup> Dodds, E. C., and Robertson, J. D.: Origin of Lactic Acid in Human Gastric Contents, with Special Reference to Malignant and Non-malignant Condition, *Quart. J. Med.*, 23:175, 1930.

<sup>17</sup> Pollard, W. S., and Bloomfield, A. L.: Gastric Secretion in Cancer of the Stomach, *Bull. of the Johns Hopkins Hosp.*, 43:307, 1930.

Severe hemorrhage, however, is much more frequent in ulcer or sarcoma than in carcinoma. The fibro-sarcoma is a relatively benign malignancy and may be cured by radical removal of the lesion.

When one is confronted with a huge smooth defect in a patient past 35, it may be exceedingly difficult to state definitely whether the lesion is a gastric ulcer or a cancer. In this type of lesion, our medical staff has applied the therapeutic test with a great deal of satisfaction. The patient is at once placed on accurately controlled ulcer management and re-rayed at frequent intervals. If the lesion continues to decrease in size, the defect is pronounced benign. If, at the end of two weeks, there is no appreciable diminution in size, that patient is promptly given the benefit of surgical exploration.

Inspection of the lesion at the operating table in this type of case may still leave the diagnosis in doubt, but radical resection at this stage will increase the number of cures.

**Prognosis**—Up to January 29, 1881, cancer of the stomach was 100 per cent fatal, the treatment only medical, the length of life varying from three months to three years and averaging 12 to 14 months. On that day, that great Viennese musician, educator and master surgeon, Billroth, performed the first successful gastric resection for cancer. Since then, the technique of gastric surgery has made great strides and while many obstacles remain to be surmounted before we can feel that we are even remotely approaching our goal, many patients are alive and well today who otherwise would have been doomed to a miserable death. Balfour<sup>18</sup> has reported 128 patients living ten years after radical resection. From our clinic, I have reported 17 living at the end of five years, and most of those resected who have died before that time have had years of comfortable palliation, rarely dying of recurrence of the local lesion.

The average length of life after mere exploration was a trifle over six months; after gastroenterostomy about nine months, and following resection—four years and nine months. Those who are alive have lived an average of six and one-half years.

The treatment, therefore, is obvious. Until the discovery of some cure for cancer in general, our efforts must be directed toward earlier diagnosis, and radical surgical removal before metastases have made cure out of the question. It is important to impress upon patient and physician the fact that slight symptoms must be heeded and carefully investigated.

#### SUMMARY

Cancer of the stomach is the most frequent cause of cancer deaths.

Fifty per cent of 500 consecutive cases of gastric

carcinoma entering the Presbyterian Hospital were diagnosed as inoperable.

The pathological picture falls into several fairly definite groups, at least 3/5 of which begin near enough to the pylorus to make them theoretically resectable. Adenocarcinoma is the most frequently found microscopic picture. It gives the most definite symptoms and offers the best prognosis after resection.

The symptoms are varied, but this very fact should be a warning to the alert physician.

X-ray examination by an expert is the most reliable aid to early diagnosis. This, combined with a good history and careful physical examination, is essential to accurate diagnosis and proper therapy.

Enough cases have now been reported to assure the most skeptical that the unfortunate victim of gastric cancer may be given years of palliation or may even be permanently cured.

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<sup>18</sup> Balfour, D.: Annual Report of Operations on the Stomach and Duodenum for 1931, *Proceedings of Staff Meeting of Mayo Clinic*, 7:99, 1932.

## CAUSES OF HEADACHE

CHARLES P. EMERSON, M.D.  
Indianapolis

Headache is the chief complaint of many patients suffering from a great variety of diseases. Often in such cases we can readily determine its cause, but in others this is difficult, at times impossible; hence, its attacks may continue to mask some underlying condition until the latter has reached an incurable stage. The following outline is an attempt to classify the common causes of headache, and to mention the great majority of possibilities. No attempt will be made to go into all the many points in differential diagnosis; these the examiner will readily recall once the possibility of a given condition comes to his mind. Not all self-evident conditions which cause head pains are included among the headaches, but of these the following deserve mention.

Neuralgia of the supraorbital branch of the trifacial nerve may simulate the headaches of migraine, eyestrain, and frontal and anterior ethmoid sinus infection. Unlike the latter, the pain of this neuralgia is strictly limited to the area of distribution of this one nerve, is most intense at the periphery of this area, and is associated with tenderness on pressure at the supraorbital notch.

Neuralgia of the great occipital nerve may simulate a unilateral occipital headache due to posterior sinus disease, the sphenopalatine syndrome, and psychogenic facial neuralgia; but the distribution of the pain, together with the tenderness over the exit of the nerve as it emerges from the posterior neck muscles, will allow a correct diagnosis. Similar occipital pains may be due to myositis of the posterior cervical muscles, or may be referred from the spine in cases of arthritis or injury to the cervical vertebrae.

Severe headache often occurs in association with many acute disorders, such as gastric disturbances, acute alcoholism, heat stroke, and many of the acute infectious fevers, as ambulatory typhoid fever. In these fevers the headache usually, but not always, is an early feature, and may for a while overshadow the characteristic evidences of the primary trouble. The presence of a rise in temperature rules out all primary headaches.

### CHRONIC HEADACHE

Headaches which persist, or recur periodically over intervals of weeks or months, present many difficult diagnostic problems. While we know little of the mechanism which produces them, yet in operating upon the cranial contents under local anesthesia the dura mater alone is sensitive, and especially along the course of the meningeal vessels; the brain itself, even when incised in a cortical area of sensation, causes no pain. Increased intracranial pressure from whatever cause generally produces a very severe headache, probably due to pressure upon the dural vessels. A

common cause of the latter is cerebral edema, either transient or chronic, which may result from many causes. It is this which possibly explains most headaches, even those of migraine.

The various pathological conditions and other abnormal states that may cause either chronic or periodic headaches may for convenience be grouped as follows:

#### Primary Intra-cranial Abnormalities.

##### *Brain*

Tumor; cyst; gumma; tubercle.

Chronic subdural hematoma.

Internal hydrocephalus.

External hydrocephalus (chronic arachnoiditis). This in its origin may be: inflammatory, traumatic, or thermic.

Edema of the brain, due to:

concussion,

encephalitis,

meningo-vascular syphilis,

brain abscess, or

sinus thrombosis.

#### *Meningitis Chronica, due to* tuberculosis, and syphilis.

#### Primary Extra-cranial Abnormalities, Causing Reflex (?) Headache.

##### *Ocular Disturbances, due to*

refractive errors,

muscle imbalance,

glaucoma, or

iritis.

##### *Nasal Passages.*

Nasal obstruction, and that of the paranasal sinuses,

Neuralgia of the sphenopalatine ganglion.

##### *Pelvic Organs; the Menopause; and Endocrine Disturbances.*

#### Headaches Due to Circulating Toxines Arising in Various Parts of the Body, as:

infected teeth;

chronic tonsillitis;

chronic sinus infection;

chronic gastritis;

excessive use of alcohol and tobacco;

constipation and chronic colitis;

syphilis;

chronic nephritis;

tuberculosis;

chronic lead poisoning;

gout (rare).

#### Headache Secondary to Anoxemia of the Brain Cells, due to:

anemia of all forms;

cerebral arterial sclerosis;

impaired cerebral circulation, secondary to cardiac disease;

carbon monoxide poisoning;

poor ventilation;

high altitudes.

#### Nervous Headache.

#### Migraine.

## HEADACHE FROM PRIMARY BRAIN LESIONS

*Brain tumors* and other space-occupying lesions of the cranial cavity generally cause a persistent or chronic intermittent headache, new to the patient, and which often awakens him at night. Unless the ocular fundi of every patient with a severe persistent headache is carefully examined for choked disc, many patients with brain tumor go unsuspected until vision is irreparably damaged and the condition is hopeless. For this reason the inspection of the fundi should be part of every routine medical examination.

*Subdural Hematoma.* Both the post-traumatic and spontaneous varieties of subdural hematoma, while not common conditions, have been found with greater and greater frequency since the attention of the profession was directed to their clinical symptoms and lumbar puncture findings (the presence of blood). Chronic subdural hematoma, the result of a head injury which caused between the dura and brain a slow hemorrhage which late becomes encapsulated, may at first cause the usual amount of headache which follows most head injuries, but the patient, as a rule, apparently recovers. Later, however, even several years after the injury, the headaches may reappear and gradually increase without apparent cause. While such a hematoma occupies intracranial space, it seldom gives rise to the symptoms of brain tumor. Rarely, however, it does cause sufficient pressure to produce hemiplegia or even loss of consciousness. The pressure of a subdural hematoma often may be suspected from the history of previous head injury; but the diagnosis may be established by the shadow on an encephalogram.

*Internal Hydrocephalus.* The internal hydrocephalus of young infants, generally the result of a congenital obstruction of the Sylvian aqueduct, apparently causes no headache, even though the ventricles become enormously dilated. Acquired internal hydrocephalus, however, which may occur at all ages from four years on, does cause intense and persistent headache. This condition, in the great majority of cases, is the sequel of blocking of the aqueduct by a cerebellar or other sub-tentorial tumor, and occasionally by inflammatory processes. Choking of the discs occurs early, but signs of cerebellar disturbance may or may not appear. X-rays of the skull, even of adults, may show the wide separation of the sutures.

*External Hydrocephalus.* External hydrocephalus is the result of the accumulation of cerebrospinal fluid between the pia and arachnoid membranes, evidences of diminished absorption of this fluid. This failure of normal absorption probably is due to a partial blockage of the fluid pathways between these two membranes by adhesions which, in the majority of cases, are the result of an arachnoiditis. The latter may follow recovery from epidemic meningitis and encephalitis, the prolonged suppuration of a mastoid process or of an accessory nasal sinus; but it has been demonstrated

also that blood in the subarachnoid space following head injuries always tends to form obstructive adhesions, and these may account for many of the cases of post-traumatic headache. The persistent headache which follows heat-stroke may, in many cases, have a similar explanation. The importance of an obstruction to the flow of the cerebrospinal fluid as a cause of severe and persistent headache is just beginning to be understood, and the more this is looked for in cases of headache the more often it is found. It is best demonstrated by encephalograms, on which the dilated subarachnoid spaces over the brain cortex can be clearly seen. Also, the injection of the air for this test often relieves the headache for variable periods of time.

*Edema of the Brain.* The acute headache following a blow on the head, that due to toxins in the blood stream associated with the acute infectious diseases, that of acute encephalitis, meningo-vascular lues, brain abscess, sinus thrombosis, cerebral anoxemia and the sick headache following gastric upsets, are most probably the result of brain edema. The same possibly is true of migraine also.

*Concussion.* Of the majority of cases of cerebral concussion, unconsciousness is the most prominent feature, but if the degree of the injury was not severe enough to produce this, headache, which persists for weeks, may result.

*Encephalitis.* An early and prominent symptom of encephalitis which usually precedes the stage of lethargy is persistent headache, probably the result of cerebral edema. Later, many other nervous signs and symptoms also appear. The most important aid in the diagnosis of this condition is lumbar puncture, for the spinal fluid always shows an increase in its pressure, white cell count, and globulin content.

*Syphilis.* The headache of early lues is most probably due to a toxic edema. That which appears later may be due to luetic periostitis, arterial disease, or increased intracerebral pressure due to a gumma. Severe and persistent headache may be the most prominent symptom of meningo-vascular lues, in both children and in adults. In all cases of chronic headache not clearly accounted for, the spinal fluid should be tested for the Wassermann reaction and colloidal gold curve, reactions frequently positive in patients with negative blood Wassermann.

*Brain Abscess.* A brain abscess can hardly be classed as a space-occupying lesion, since in most instances the pus occupies the space of destroyed brain tissue; nevertheless a zone of edema usually surrounds the abscess, and on the degree of this edema, which varies much from time to time, does the marked variability of all the symptoms of this lesion, including headache, seem to depend. Early, the headache is continuous; but as the abscess becomes more and more chronic, the attacks of headache become periodic. The diagnosis of a brain abscess probably is one of the most dif-

ficult of clinical problems, since as a rule there is no fever and often no definite physical signs of increased intracranial pressure. However, the association of headache with inflammation of a mastoid process or of one of the nasal accessory sinuses, or following trauma, even without fracture of the skull, suggests this diagnosis.

*Sinus Thrombosis.* Headache due to cerebral edema is a symptom of thrombosis of one of the cerebral venous sinuses, but in most cases the cause of this condition, usually mastoiditis, facial erysipelas, or other infected areas about the head, is apparent. Rarely a sinus thrombosis occurs in poorly nourished children, and at any age secondary to bloodstream infection.

*Chronic Meningitis.* The headache of chronic meningitis is most severe and constant, but rigidity and retraction of the head, Kernig's sign, and other features of this condition generally are so marked that the nature of the condition may at once be suspected. The two main types of this condition are the tuberculous and the luetic.

*Tuberculous Meningitis.* Severe persistent headache, frequently wrongly diagnosed, is a very common symptom of tuberculous meningitis, especially in children. It is rare in adults, but in obscure cases its presence should be excluded. The presence of rigidity of the neck, a positive Kernig's sign, a low degree of fever, and a spinal fluid which shows a slight increase in the cell count, a pellicle, and an absence of sugar, generally suggests the diagnosis. Since the clinical features of tuberculous meningitis occasionally resemble those of cerebellar tumor, before making a lumbar puncture it is best to examine the eyegrounds for choked disc, a condition rarely seen in chronic meningitis; and if this is present, it is a warning that spinal puncture should be done with caution. Again, the formation of a pellicle in the spinal fluid is not always indicative of tuberculous meningitis, since it occasionally forms also in the fluid of cases of chronic encephalitis; but in the latter condition the cell count usually is higher and the amount of globulin greater, while glucose, practically always absent in tuberculous meningitis, may be present.

#### EXTRACRANIAL CONDITIONS WHICH REFLEXLY CAUSE HEADACHE

*Ocular Headaches.* Errors of refraction and ocular muscle imbalances are very common causes of chronic headache, and since often suffered by patients who are not aware of their visual defects, careful eye examinations should be made of all patients with this symptom. Such headaches usually start in the late afternoon and are limited to the area of reference of the ciliary muscles, therefore the forehead and anterior scalp region. During young adult life these headaches often are paroxysmal and associated with vomiting. With the development of presbyopia, however, they become more constant and there is less vomiting, but

mental depression often becomes one of their marked features. Many persons whose headaches follow a severe illness or trauma, especially a head injury, are found on eye examination to have serious errors of refraction. Such patients insist that no such trouble existed prior to their illness or injury, which means that while in good health they were able to accommodate for their visual error which the weakness following the illness brought to light.

*Glaucoma* may manifest itself by a generalized headache before the pain becomes localized in the affected eye. The same is true of a chronic low grade of iritis, especially the syphilitic form.

*Nasal Headaches.* Headaches from obstructions of the nasal passages, and especially if this closes the opening of the para-nasal sinuses, are common. Such headaches are generally worse early in the morning, are dull in character, and are directly dependent on changes in the weather. Pollen and other dusts may, in allergic persons, lead to a marked congestion of the nasal mucous membrane which results in headache. In most cases of this type the shrinking of the nasal mucous membrane by the local application of cocaine or ephedrine gives relief.

*Neuralgia of the Sphenopalatine Ganglion* is a rare cause of generalized or unilateral headaches. Often these are accompanied by neuralgias in the areas of distribution of other sensory cranial nerves. The topical application of a cocaine solution to the mucous membrane over the ganglion, or the injection into it of alcohol and novocaine, generally relieves it promptly.

Diseases and malpositions of the pelvic organs, ovarian tumors, the changes associated with menstruation and the menopause, and ovarian endocrine disturbances, have been held responsible for many cases of chronic headache. Such may be due to the congestion of the Schneiderian membrane which usually occurs in association with menstrual disturbances, for this may, if the nostrils are narrow, obstruct the latter. In other cases, however, the only probable association between these two conditions depends on anxiety reactions aroused by any bodily disease or abnormality, for these often result in chronic headache. Cases of hyperthyroidism may suffer from headaches related to the general nervousness, or to the muscle imbalances caused by the exophthalmos; but many chronic headaches do seem to be definitely related to hypothyroidism, and these are promptly relieved by the administration of thyroid extract.

*Headaches Secondary to Circulation Toxines from Various Parts of the Body.* Infected teeth, chronically infected tonsils, chronic sinus infections, chronic gastritis, constipation, chronic colitis, and the excessive use of alcohol and tobacco, are frequently associated with headaches due to mechanisms not at all understood, and which probably are varied. In such cases one should be on his guard, since the syndrome of headache, nausea, and

vomiting may be due also to some intracranial lesion, especially brain tumor, a condition which too often is treated for one of the above conditions.

Late luetic and subacute tuberculous infections anywhere in the body may be associated with chronic headache.

*Chronic nephritis*, especially if with beginning uremia, causes, as a rule, severe headaches. The finding of albumen in the urine, an increase of the non-proteid blood nitrogen, often abnormally high blood pressure, and the frequent presence of a retinitis or beginning choked discs generally suggest the diagnosis; yet the urine of some patients suffering from nephritis with severe headaches may appear normal, also; their blood pressure may not be elevated. Because of the fundus changes, brain tumor may be suspected, while, on the other hand, a patient with a brain tumor may suffer also from nephritis and be treated for the latter alone.

*Chronic lead poisoning* is generally accompanied by persistent headache. In many patients this may be the initial symptom, followed later by colic and polyneuritis. The occupation of the patient, the presence of the lead line on the gums, and the demonstration of stippled cells in the blood will confirm this diagnosis.

*Gout*, a condition rarely seen in this country, in England is a common cause for headache.

#### HEADACHE SECONDARY TO ANOXEMIA OF THE BRAIN CELLS

Those conditions which reduce the supply of oxygen to the brain cells often cause headache, possibly by the production of cerebral edema. Among the conditions which cause headaches probably of this origin are: anemias of all forms, but especially the chlorosis of young adults; arteriosclerosis of the cerebral vessels, in elderly persons especially; cardiac decompensation; carbon monoxide poisoning, if not severe enough to produce unconsciousness; and ascents to altitudes of 5,000 feet or more above sea level, by those not accustomed to such elevation.

*Nervous Headache*. The so-called nervous headaches, very common, can be secondary to fatigue, worry, anxiety, over-work, loss of sleep, and a host of other fatiguing and annoying circumstances. In most cases of this type the patient himself makes the correct diagnosis. In some psychoneurotic patients, however, a chronic headache may be the physical equivalent of some repressed fear or worry, which mental exploration alone will reveal. In other individuals the headache is a defense reaction by means of which they escape from some unpleasant or to them difficult obligation. The diagnosis of nervous headache should never be made until all possible organic causes shall have been excluded.

*Migraine*. Migraine is the most common form of severe periodic headache for which no organic cause has been found, and is, so far as can be determined, a purely functional disease, since it

occurs in persons otherwise normal. It is definitely a familial condition, but is not necessarily evidence of a neurotic personality, for it often occurs in those whose work requires great mental effort. Its attacks, which may occur at fairly definite intervals, usually are ushered in by some sort of aura, as flashing lights; the pain often is confined strictly to one side of the head; and nausea, vomiting, psychic depression, and many other nervous symptoms are common features of the attacks. The diagnosis of migraine should not be made, however, until all other possible causes have been ruled out.

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## A METHOD FOR DETERMINING THE PROPER TIME FOR RIB RESECTION IN EMPYEMA THORACIS

(STATISTICAL STUDY OF 123 CASES PRIOR TO ITS USE AND 27 CASES SINCE ITS ADOPTION)\*

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Our study reveals that empyema is secondary to pneumonia in 93.4% of the cases. A young child's lung has proportionately more bronchial and less alveolar structure. It fills the entire pleural cavity and when the lung infection invades the pleural covering it is apt to be general or diffuse (81.2%). The problem with this infection is the same as with any other, namely the invading organism against the resistance of the individual as a whole and the tissue affected in particular. The pleura like the peritoneum is a mesenchymal structure known as mesothelium. Both have a relatively high degree of resistance, and may be interchangeably cause and effect. This survey was made on children between the ages of 6 months to 16 years with resistance lowest in the youngest. The organism was usually the pneumococcus (80.5%); however, the streptococcus was also at fault (17.9%), and here as usual it invaded the connective tissue planes and markedly delayed localization, causing most of the fatalities. Then, too, it usually occurred synpneumonic further taking advantage of a weakened host. Fortunately, most empyemas are metapneumonic (60.9%) giving a much better prognosis. The staphylococcus was the causative organism in only two cases and proved fatal in one.

This pleural infection behaves very much like pyogenic infections elsewhere and as we shall see, after the peculiarities of thoracic physiology are discussed, is amenable to the same forms of treatment as govern the above. "A study of the pathology teaches one lesson in particular—that if the functional value of the lung is to be retained, the septic process must be relieved at as early a stage as possible."<sup>1</sup> Resolution may occur and undoubtedly does so in many instances. More commonly localization takes place, in which event an abscess cavity is formed. Less often the infection is disseminated giving rise to general septicemia and death. Our problem resolved itself into finding the proper criteria for operation so that it could be done early, the type operation to use, and the method of after care.

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The author gratefully acknowledges the cooperation of Dr. D. S. Megenhardt, resident, and Drs. G. I. Polhemus and R. P. McCombs, interns, in the Riley Hospital.

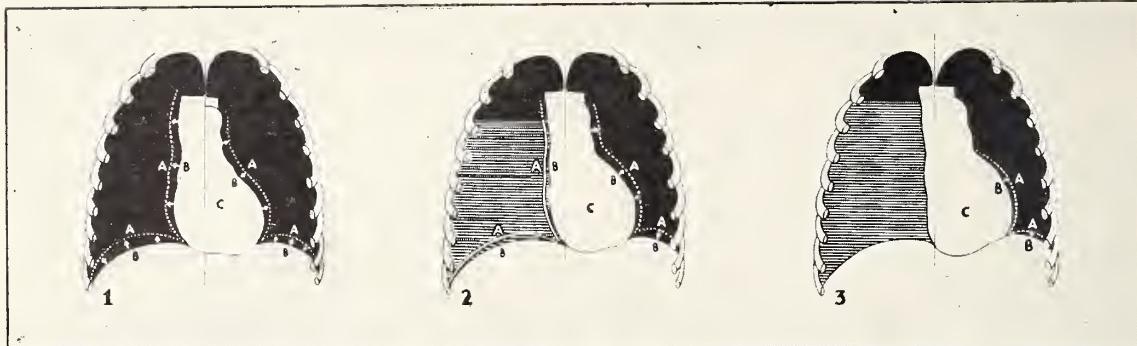
<sup>1</sup> Fraser, John: *Surgery of Childhood*. Volume II. Wm. Wood & Co., 1926.

It is important here briefly to review some of the pertinent facts concerning intra-thoracic physiology. During normal respiration the diaphragm descends and the mediastinum is slightly narrowed. During expiration the reverse is true. (See diagram No. 1.) The mediastinum in the child is a very movable structure easily affected by changes in intra-thoracic pressure. A lower vital capacity than in the adult is also apparent. The child's lungs fill the entire pleural cavity, for normally the thorax grows away from the lung with increase in age, leaving a small pleural space. Consequently the elastic recoil of the lung will be less than in the adult and therefore intra-pleural tension in the child reaches zero at the end of expiration, whereas it is minus zero in the adult.

Dr. John Fraser, of Edinburgh, has demonstrated intra-pleural pressure in a conclusive manner.<sup>1</sup> He introduced a hollow aspirating needle of large bore (15 gauge) into the pleural cavity and attached it by a tube to a manometer. In this way he could accurately record pressures. He found that normally in a child of five there is a range from minus 2 mm. with expiration to minus 6 mm. of mercury with inspiration. In adults it is more negative. In an empyema without walling-in, and therefore without fixation of the mediastinum, diaphragm and lower lung level, there is a very wide fluctuation varying from minus 5 mm. at inspiration to plus 10 mm. at expiration. However, after localization occurs the intrapleural pressure remains positive with very little fluctuation, from plus 5 mm. to above plus 8 mm. of mercury.

This is a very important observation and clearly explains the surgical pathology of empyema. The intra-thoracic space is increased by displacement of the mediastinum and the descent of the diaphragm. This mediastinal displacement occurs very early in children and is not only due to pushing over, but also "sucking" over by the heavily breathing lung of the other side.<sup>2</sup> But after fixation occurs there is little or no movement. The practical importance of this is obvious, for a patient can tolerate thoracic section in direct proportion to his vital capacity. If the mediastinum is not stabilized by adhesions, the normal lung suffers as much as the collapsed one. Furthermore "mediastinal flutter" may compromise the circulation in the large venous trunks, the right auricle, and may cause a kinking of the inferior vena cava as it passes through the diaphragm.<sup>2</sup> The latter would be more apt to occur in right-sided empyema. But after localization occurs, so far as the thoracic mechanics are concerned the empyema is a walled-in abscess and even with atmospheric pressure (760 mm. of mercury or 14.7 pounds to the square inch) no harm occurs to the lungs or mediastinum. And, of course, as soon as the tube is removed the opening immediately decreases in size

<sup>2</sup> Ruetz, A.: "Die Behandlung des Pleura Empyems." *Klin. Wochenschr.* 1933-II—1414.



*Fig. 1. Thoroscopic examination is made in the reclining and upright positions.*

*Diagram No. 1: Normal movement of mediastinum and diaphragm during respiration. (a) Expiration; (b) Inspiration; (c) Mediastinum in midline.*

*Diagram No. 2: Empyema Cavity before localization. (a) Expiration; (b) Inspiration; (c) Mediastinum pushed over to the normal side.*

*Diagram No. 3: Empyema cavity after localization. No movement on the affected side. (a) Expiration on unaffected side; (b) Inspiration on unaffected side; (c) Mediastinum pushed over to normal side.*

until it is smaller than the main bronchus and negative pressure begins.

This walling-in also implies that immunological localization has taken place. According to Thorsness and Higgins,<sup>3</sup> this occurs for colloids after the first day and for crystalloids after the sixth day. By injecting aleuronat into the pleural cavity this localizing process was well demonstrated by them. It is no doubt due to the formation of a pyogenic membrane with fibrin and clot occlusion of the lymphatics and later the capillaries. An empyema then may be regarded as an abscess of the pleural cavity after localization has occurred. If this is true it should be treated as such. The next problem then was to evolve a method whereby one could find the proper time for surgical intervention by open drainage, for it was our belief that as soon as localization had occurred, operation was indicated regardless of the consistency of the pus or other considerations, aside from the ability of the patient to withstand surgical procedure.

Fraser's method for determining localization is not suitable for routine use and therefore a more practical way had to be found. We decided to use the fluoroscope as an aid. Dr. C. S. Wright, of the Indiana University x-ray department, kindly assisted us in this study. First, we observed normals and we found that the mediastinal shadow is narrowed during inspiration and widened during expiration. (See diagram No. 1.) This diaphragm descends during inspiration and ascends during expiration. With fluid, even though the mediastinum is pushed over and the diaphragm down, there is still movement as above described before walling-in has occurred. (Diagram No. 2.) However, after localization there is very little or no movement of the mediastinum or diaphragm or compressed lung margin on the affected side, with increased movement on the normal. (Diagram No. 3.) Using this

method as our criterion for surgery, we operated upon our patients as soon as fixation occurred. Fluoroscopic examination is made on all patients upon admission and then every other day until surgery is indicated.

We have now used this method on 27 cases and have found that localization will occur on the seventh to tenth day, and although the pus is thick in most of these it is very thin in some. Formerly in 56.9% of these children the character of the pus was the important criterion used to determine localization. Other criteria such as height of fever, dyspnoea, displacement of mediastinum, etc., were also used. Of the cases referred for surgery thick pus was found in 78.8% at operation. It is interesting to note that waiting for this pus to thicken required an average of 20 to 30 days and after it thickened five to 15 days elapsed before surgery was done. During this long period marked toxemia was apparent, and no doubt permanent lung crippling followed. In the present group of cases the only criterion for operation was localization as determined by the fluoroscope and the general condition of the patient. With this method the average length of time before surgery was seven to ten days. If the general condition is grave a blood transfusion is given prior to operation for there is no operation that has merit enough to be used on a patient who cannot stand it. While waiting for localization to occur aspiration is done every other day to allay respiratory embarrassment and to preclude the possibility of mistaking immobility due to enormous effusion for true fixation. This has not been observed thus far. If localization does not occur, the closed method or repeated aspiration may be indicated.

After localization the second most important consideration in the treatment of an abscess is adequate drainage. In septicemia if an acute focus can be removed or drained, all things being favorable, the patient probably will recover. Such is

<sup>3</sup> Thorsness, E. T., and Higgins, G. M.: "Absorption from Experimentally Produced Abscess." *Proc. Staff Soc. Mayo Clinic*, Vol. 6, No. 39, pp. 578, Sept. 30, 1931.

usually the case in metapneumonic empyema. Obviously if a pneumonia is present (synpneumonic) the acute focus is in the lung, but if localization of the empyema has occurred adequate drainage is indicated. Of the 123 cases studied 100 had rib resection with a mortality of 4.9%. Seven had the so-called closed method with catheter drainage and 16 had repeated aspirations. The mortality in this group was 15.4%, although it should be said that under former criteria the latter group represented more profoundly ill children. However, these findings together with the fact that the treatment of empyema is essentially the treatment of an abscess after localization, led us to adopt open operation with rib resection as the proper type of surgical procedure. But even with open drainage, the tubes must not be small, or they will be entirely inadequate. We now do a rib resection over the lower portion of the empyema. After the pleural cavity is entered a finger is introduced gently to break down partitions. Then all large clots of purulent debris are aspirated or manually removed. A 9/16 inch rubber tube is introduced and anchored to the skin with a silkworm gut stitch and a safety pin is placed through the tube to prevent aspiration. The procedure is always done under local anesthesia. Careful fixation of the patient by strapping is employed on the operating table and sedation is obtained by small doses of morphine prior to surgery.

An abscess cavity properly drained must also be kept free of foreign bodies. This is done at the time of operation and any fibrinous masses which may form later are removed from the tube by forceps. The next step in the treatment of an abscess is obliteration of dead space, in other words "healing from the bottom up." In empyema healing takes place by granulations from the visceral pleura which fuse with the parietal pleura, and by the ascent of the diaphragm. The lung expands because of: (1) The contractile force of adhesions which pull it out, and (2) positive pressure within the collapsed lung driven into it by forced expiration from the normal side, (3) the stretching effect of forced inspiration on the adhesions of the parietal pleura which tend to inhibit expansion, and (4) negative pressure in the empyema cavity during inspiration when the drainage opening is smaller than the main bronchus.

If an abscess is to heal the part must be put at rest and given a chance. Our study shows that prior to 1935, 77.2% of these patients received daily irrigations with various solutions. Two nurses on Ward B of the Riley Hospital were kept busy giving this treatment. We have now discontinued all irrigations. Dressings are changed as required, but always as infrequently as possible for we believe with Paracelsus that "nature and not meddling heals wounds." We felt, too, that the tube acts as a foreign body and would actually perpetuate a cavity if left in too long. Therefore, after the seventh day the silkworm gut suture is

cut and the tube is allowed to "work its way out." This occurs due to rapid filling in of granulation tissue and some lung expansion.

If the tube is not out by the tenth day a fluoroscopic examination is made. This will disclose fluid levels or "pockets" with fluid if any are present. By gently moving the patient in the upright posture behind the fluoroscope, the fluid is clearly seen to move about due to the presence of air. If no fluid is present and if the drainage is thin, the tube is promptly removed. It should be remembered that the time required for the obliteration of an empyema cavity may be exceedingly variable. One cannot be dogmatic about the length of time that drainage should be continued. This depends upon the fluoroscopic examination and the character of the pus.

After the tube has been removed, a vaseline gauze dressing is applied. Each day for approximately one week the crusts over the granulating sinus are removed and the tract gently probed. This is done so that healthy granulations are established and so that local "pockets" may not form. Four children who were released from the hospital and did not return for observation and dressings required re-insertion of their tubes for short periods.

In treating our empyema cases, we do not forget the patient as a whole. We have found that adequate fluid balance aided by blood transfusion are very helpful allies. Fluoroscopic examination at the end of 13 or 14 days shows the opaque or dense area diminishing and the lung expanding. At this time our patients are released from the hospital. In our previous group complications occurred in 2/3 of the patients. In about 1/3 of this group the complication was otitis media. We believe this was partially due to the long period of hospitalization, where children are almost certain to "pick up" upper respiratory infections from others. Prior to 1932 the average empyema case remained in the hospital 63 days. In 1935, after adopting open operation with large tubes and eliminating the irrigations, the time dropped to 24 days and since the advent of our present routine, the time is approximately 18 days. This may be still further reduced.

These patients are observed in our out-patient department twice a week until complete recovery takes place. In the present group of 27 cases this occurred in about thirty days. There was no mortality and no respiratory embarrassments or other complications were observed after operation. However, we are aware that the group is too small to draw final conclusions and that seasonal variations in virulence may greatly alter this record.

#### SUMMARY

1. A method for determining the proper time for rib-resection in empyema has been evolved with the aid of the fluoroscope.

(Continued on page 424)

## SOME COMMON SURGICAL COMPLICATIONS IN SENILE CATARACT\*

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Operative accidents and post-operative complications are closely associated. Many of the latter develop as the result of some minor operative mistake. The type of operation performed may predispose more to certain operative accidents and post-operative complications than to others. A well performed intracapsular extraction does not offer as many possibilities for post-operative complications as the capsulotomy operation presents. On the other hand the intracapsular extraction may present a greater hazard in the form of vitreous prolapse with subsequently drawn up pupil, cystoid cicatrix, intractable mild cyclitis or even intraocular infection if the surgeon did not possess a light touch and accuracy of movement of hands on the day of the operation. Precision in the surgery prevents many post-operative complications.

The ideal cataract operation is the removal of the lens in its entirety from the eye without disturbing other intraocular structures, and preferably with the retention of a round pupil. We are not always able to attain the ideal. Sometimes the patient and surgeon are obliged to be content with lesser results. Technical difficulties may offer troublesome obstacles. The patient may misbehave at a critical moment and the lens capsule become torn. This does not necessarily compromise the final visual result in terms of central visual acuity unless some other unpleasant complication develops. It is true that many surgeons cling to the old capsulotomy operation and seldom or never intentionally perform intracapsular delivery, and that their results in terms of central visual acuity compare favorably with those of other surgeons who attempt to perform an intracapsular extraction in most cases. However, the capsulotomy operation always produces post-operative complications.

The retention of masses of lens capsule and cortex within the eye always causes inflammatory reaction of the iris and ciliary body. The absorption of lens substance within the eye produces a biological chemical iridocyclitis. The more severe form of this reaction represents what Verhoeff described as endophthalmitis phaco-anaphylactica. This may take place in either eye when the capsulotomy operation is performed. Naturally, it is more liable to occur for the second than for the first eye operated upon.

The iris and the remains of the lens become agglutinated into one mass. The pupil is immobile, deformed and fixed in position. We know that a mobile pupil is an asset to the eye. Should the iris become fixed to masses of lens capsule, some of the

function of the eye will be lost and this cannot be expressed in terms of central visual acuity.

Where capsule extends into the pupillary area, and it seems to have a preference for that location, additional secondary operative procedures are necessary. Many patients have been subjected to post-operative capsulotomy or irido-capsulotomy operations for secondary cataract with pleasing final visual results, but there is no operation upon the eyeball which I consider fraught with more danger than are these. Every ophthalmic surgeon can remember patients who were subjected to post-operative capsulotomy operations for secondary cataract and who afterward had poor central vision. Examination discloses no pathology of the fundus. Disturbances produced by the knife needles defeated the purpose of the first operation. Even intraocular infection has resulted from the so-called minor after-operation with total loss of the eye.

Fragments of capsule may become wedged between the lips of the wound when the lens is delivered and prevent proper coaptation of the wound. Restoration of the anterior chamber is delayed and this may later lead to more serious complications, e. g., cystic bulging of the wound, post-operative secondary glaucoma, infection, and intraocular hemorrhage.

### PROLAPSE OF IRIS

Prolapse of the iris is a troublesome complication. It usually occurs within the first forty-eight hours after extraction, often within the first twelve. The patient complains of ocular pain and is restless and uncomfortable. When the dressing is changed, a knuckle of iris is discovered in or protruding from the wound. Immediate iridectomy should be made. Prevention of this complication consists, briefly, in the execution of a smooth, well-performed incision with a sharp Graefe knife, closure of the wound with sutures, and meticulous post-operative attention to the care and comfort of the patient. I am personally in favor of making a large conjunctival flap with the Graefe knife when the incision is made and in suturing the wound with fine silk at the close of the operation. More freedom can safely be given the patient when the incision is closed with sutures. It is not necessary to keep the patient motionless in bed, as was the former routine in many institutions, with restraint to body and extremities and sandbags placed at both sides of the head, if the incision has been firmly closed with fine sutures. My own routine has been to place the patient at once on a backrest and to permit the patient to turn or to be moved by the nurses toward the unoperated side as desired. This contributes much to the personal comfort of the individual. When the patient is at ease and relaxed there is much less chance of a sudden physical effort that causes rupture of the wound and prolapse of iris.

\* Read before the Indiana Academy of Ophthalmology and Oto-Laryngology at Martinsville, April 8, 1936.

Many of you have had patients misbehave to an alarming extent and the eye did not suffer any damage when sutures had not been used to close the wound. One of my first experiences of this kind occurred while I was a resident surgeon at Wills Hospital. A patient developed post-operative mania and performed many acrobatic feats. The eye was not damaged. An excellent final visual result was obtained. However, the chances of severe ocular injury are much greater for the patient who has not had the wound firmly united with sutures as compared to the one who has received this added attention.

Another preventative measure against prolapse of the iris is an iridectomy. Some men prefer to do the simple extraction, i. e., without iridectomy. These men seem to be in the minority. There is a general consensus of opinion that some form of iridectomy should be made. The common practice is to make a complete but single iridectomy placed at 12 o'clock on the dial. However, with the complete broad iridectomy a lesser complication frequently occurs, and that is incarceration of one or both pillars of the coloboma in the scleral wound. For several years the peripheral iridectomy (some prefer iridotomy), has gradually found favor. My own preference is for three small basal iridectomies situated evenly at the root of the iris. This gives ample drainage area for the aqueous behind the iris and retains the functions of the pupil. A complete iridectomy is used only in those cases where there are pre-operative complications present, such as synechiae of iris to lens, and when these synechiae must be broken before delivery of the lens is attempted.

#### POSTOPERATIVE INTRAOCULAR HEMORRHAGE

Post-operative intraocular hemorrhage may occur in the form of hemorrhage into the anterior chamber, or hemorrhage of the choroidal vessels. Fortunately, the latter happens so infrequently that it is regarded as a rare occurrence. The eye is destroyed. There is nothing that the surgeon can do to avoid such a complication for what otherwise appears to be an eye that offers hope of a good operative result. Hemorrhage into the anterior chamber may occur several days after the extraction was performed and is produced by a small rupture of the wound. Physical discomfort of the patient is the common cause of this accident. As a rule, the hemorrhage will be absorbed in the course of a few days without permanent impairment, but there are a few cases in which the hemorrhages leave behind a fine membrane over the pupil. This requires a secondary operation later.

Intraocular infection is one of the gravest complications that may occur in any ocular operation. The infection may be either endogenous or occur by direct extension from adjacent structures. When the infection is endogenous one will discover neglected foci of infection, such as teeth, nasal sinuses,

and chronic genito-urinary infections. Chronic constipation is a directly contributing cause.

The majority of ocular infections occur by direct extension from the ocular appendages. The lacrimal passages are frequently diseased and virulent bacteria are introduced into the wound from this source. The conjunctiva may be infected but not conspicuously altered in appearance. Careful examination should be made of the lacrimal passages and conjunctiva several days before extraction is performed. The use of a cleansing and anti-septic solution in the eye for many days preceding the operation is an excellent form of prophylaxis. Many surgeons insist upon repeated cultures being made from the lower cul-de-sac until one or more show no organisms. This is a splendid precaution. Immediate pre-operative preparation may be made in different ways, but the idea is to irrigate the eye with a mildly antiseptic solution. Different ones are used. My own preference is to use mercury oxycyanide solution. It is comparatively non-irritating to the eye and is efficient. Another important prophylaxis against intraocular infection is the execution of a good sized conjunctival flap at the time of operation. The edges of this flap should be carefully united with the conjunctiva of the eyeball. Where a portion of the incision is not covered by the flap many surgeons wisely dissect a small apron flap of bulbar conjunctiva and slide it over the incision. Strict asepsis should be observed at all times in the conduct of the operation. Furthermore, it is to be remembered that lens cortex and vitreous substance are ideal culture media.

When intraocular infection does occur it nearly always rapidly produces panophthalmitis. If the invading organisms are of reduced virulence an occasional patient may be spared such a disastrous result. The surgeon may use any and all local antiseptic measures, and endeavor to stimulate the patient's resistance by the intramuscular injection of various non-specific protein substances. My own opinion is that none of these measures is of any value. The infection burns itself out, so to speak, and is overcome by the natural body resistance of the patient. Nearly all of the eyes that become infected are rapidly lost by the development of panophthalmitis.

#### SECONDARY GLAUCOMA

Secondary glaucoma occurring after cataract extraction is another serious complication. The prognosis for the eye is grave. There are always other complications that precede the development of glaucoma. Careful examination will usually show some of the following conditions: incarceration of the iris into the scleral wound in such a manner that the iris angle is obstructed; vitreous adherent to the scleral wound; portions of the cortex and capsule agglutinated to the iris and placed in such a way that not only has the iris lost its function

but the anterior chamber is altered in depth, and the down growth of epithelium into the anterior chamber with the formation of an epithelial cyst between the cornea and iris.

There is very little that the surgeon can do in such a situation. An epithelial cyst may be treated with radium. Vail reports the successful destruction of an epithelial cyst by the application of radium. The other complications are best treated by carefully avoiding them at the time of operation. Occasionally a carefully performed cyclo-dialysis will liberate the iris or lens capsule from the scleral wound and relieve the elevated intraocular tension, but usually all efforts fail to aid the patient. At last, enucleation of the eye is necessary to relieve the patient's suffering.

#### CONCLUSIONS

In conclusion, I wish to emphasize observance of the following points for avoiding post-operative complications in senile cataract extractions:

1. Careful pre-operative preparation of the patient.
2. Good anesthesia, with akinesia of the eyelids.
3. Delivery of the lens in the capsule without traumatizing other intraocular structures.
4. Multiple peripheral iridectomies, a large conjunctival flap and closure of the wound with fine silk sutures.
5. And above all else, take steps to assure post-operative comfort of the patient.

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#### METHOD FOR DETERMINING PROPER TIME FOR RIB RESECTION

(Continued from page 421)

2. Careful study of 123 cases prior to 1935 revealed the following information:
  - a. The open operation with rib-resection and the use of a large tube is the method of choice.
  - b. Irrigation of an empyema cavity after this operation prolongs the convalescence.
  - c. Early removal of the tube (usually about the tenth day) shortens convalescence.
  - d. The patient should never be allowed to go home with the tube in place.
  - e. He should be observed at least bi-weekly until complete recovery occurs.

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Get your choice of hotel  
reservations at South Bend,  
October 6, 7, and 8. Make  
them now. See page 441.

## JOHN SHAW BILLINGS AND THE CENTENARY OF THE ARMY MEDICAL LIBRARY\*

EDGAR F. KISER, M.D.

Indianapolis

As the culture of a people is largely reflected in its literature, so the growth and development of a science is portrayed in its collected writings. A library thus becomes the measuring-stick of progress.

It is with no little pride and satisfaction that the physicians of America point to the institution which symbolizes their progress, the Army Medical Library, as the greatest in all the world. We in Indiana are particularly proud that the real growth and development of that library may be ascribed to the genius, the forethought and the untiring efforts of a native Hoosier, John Shaw Billings, Surgeon, U. S. A., born April 12, 1839, in Switzerland County. His father was James Billings of Saratoga County, New York, and his mother was Alby Shaw, of Rhode Island. How or why the family emigrated to Indiana is not known.

Dr. John Shaw Billings was graduated from Miami University at Oxford, Ohio, in 1857. In 1860 he received his Master's degree, and also graduated from the Ohio Medical College in Cincinnati. He began practice in Cincinnati, but shortly thereafter entered the medical department of the United States Army, and in November, 1862, was appointed assistant surgeon in charge of hospitals at Washington, D. C., and West Philadelphia. His further military duties included service as operating surgeon in the field hospital of the Second Division, Fifth Corps, Army of the Potomac, at Chancellorsville, Virginia, charge of the field hospitals of the same division at Gettysburg, and hospital duty at David's and Bedloe's Islands in New York harbor. In February, 1864, he was sent as a member of a special expedition to Vassal, W. I., and later in the same year was attached to the office of the surgeon-general in Washington, where he remained for many years. Dr. Billings' faithful and meritorious service during the war won for him the successive ranks of captain, major, and lieutenant-colonel.

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\* The preparation of this article was suggested by Major Edgar Erskine Hume, the librarian of the Army Medical Library. In a recent letter he said: "I am sending you a copy of a paper that I have written about this Library, which may interest you as a native of Indiana because the real father of this institution was born in your state, and was, in my opinion, one of the greatest medical men our country has ever produced. I really think that in this, the one hundredth year of our Library, an appropriate reference to Billings and his great work might be made in one of the state medical journals." Many of the facts in this article have been taken from a paper by Major Hume in the April, 1936, issue of *The Military Surgeon*.

Dr. Billings was a versatile man and seemingly was uniformly successful in anything which he undertook. The diversity of his medical interests may be noted in the titles of some of his many publications: *Surgical Treatment of Epilepsy*, *Medical and Surgical History of the Rebellion*, *Reports on Diseases of Cattle in the United States*, *Reports*



*Colonel John Shaw Billings, M.D., LL.D., D.C.L.  
(1838-1918)*

*Father of the Army Medical Library.*

*This portrait by Cecilia Beaux, was presented to the library  
by 260 physicians of America and Britain.*

*—The Military Surgeon, April, 1936.*

*on Barracks and Hospitals, Notes on Hospital Construction, A Sanitary Survey of the United States, The Cholera Epidemic of 1873 in the United States, Reports and Papers on the Johns Hopkins Hospital, and many others.*

His *Literature and Institutions* is a classic deserving special mention. Published in the *American Journal of the Medical Sciences* in October, 1876, as a part of a series of articles entitled *A Century of American Medicine*, Billings reviewed the important works published in the United States during the first hundred years of its independence, with thumb-nail sketches of the authors, in a way that makes it an invaluable storehouse of information for the medical bibliophile and bibliographer. Garrison says he wrote the best history of surgery in the English language. His *chef-d'œuvre* was the *Index Catalogue of the Surgeon General's Library*.

One of Dr. Billings' outstanding accomplishments was the designing of the Johns Hopkins Hospital. The trustees of the proposed institution invited five experts in hospital planning to submit plans and designs, not only for construction but for heating, ventilating, and administration. Dr. Billings' plans were chosen and he was appointed medical advisor to the trustees; his reports on hospital construction in that connection have since become recognized standards. Not only was he largely responsible for the physical plant, but it was he who recommended to the Board of Trustees the appointment of Dr. William H. Welch and Sir William Osler to their respective chairs. Major Edgar Erskine Hume remarks that "Billings' personal connection with the Johns Hopkins Hospital did not end with his drawing the plans, for in that institution Dr. William S. Halstead twice operated him for cancer of the lip. That Billings was spared to round out his seventy-five years was due in some measure to the skill of the professor of surgery at Johns Hopkins."

Dr. Billings was in charge of the vital and social statistics of the tenth and eleventh censuses of the United States and was largely responsible for the development of our excellent United States Public Health Service. As a result of his interest in public health, he was appointed professor of hygiene in the University of Pennsylvania.

One of Dr. Billings' greatest accomplishments, outside of medicine, was the consolidation and cataloging of the three public libraries of New York City. After this enormous task was completed and the unified institutions were housed in the magnificent structure which they now occupy, he was made the librarian. During his declining years he interested himself in the development of the Carnegie Institute in Washington.

Dr. Billings' very fine qualities were appreciated by learned bodies at home and abroad and he was acclaimed by membership in such organizations as the National Academy of Sciences, The American Philosophical Society, and the Royal College of Physicians, as well as by honorary degrees which were conferred by Harvard, Yale, Johns Hopkins, Oxford, and the universities of Edinburgh, Budapest, Munich, and Dublin. In 1899 he was honored by an invitation to address the British Medical Association and spoke on "Medicine in the United States of America."

Remarkable as was the man, greater still was his brain child, the Surgeon General's Library, and more particularly the *Index Catalogue* which he conceived. A mere handful of books, the nucleus of the library, was collected in 1836 by Surgeon-General Lovell, the friend and patron of the immortal Beaumont. Thus this calendar year marks the centenary of the actual establishment of the library. It grew very slowly and the first catalog, prepared in 1840, was a mere pamphlet in manuscript listing 128 volumes. It was not until 1865

that a catalog was printed, again a pamphlet listing only 2,253 volumes. In 1868, Dr. Joseph K. Barnes, the Surgeon-General, diverted the sum of \$80,000, which had remained in the Civil War hospital funds, to the library fund, and entrusted its expenditure to Dr. Billings. As Osler once said of William Beaumont and Alexis St. Martin's gastric fistula, "The man and the opportunity had met." How wisely Billings expended his newly acquired wealth the library itself will attest, for it has become the largest medical library in the world, containing more than a million items. Every American medical publication comes to its shelves through the copyright office, so that the bulk of available funds is spent for foreign works and for old and rare books. Thus it has become a storehouse of priceless volumes, many of them unique.

In 1871 Billings published his first catalog of 476 pages. The introduction reads: "That there is need in this country of a medical library of this character is sufficiently evident from the fact that, in all the public medical libraries of the United States put together, it would not be possible to verify, from the original authorities, the references given by the standard English or German authorities, such as Hennen, Reynolds, or Virchow. No complete collection of American medical literature is in existence; and the most complete, if in this country, is in private hands, and not accessible to the public, while every year adds to the difficulty of forming such a collection as the government should possess." Three years later there appeared a three-volume catalog, each volume approximately the size of those now issued. These were practically nothing more than accession lists with little or no cross-indexing. As a student at Ohio Medical College, Billings had realized the necessity of an index to medical literature. He had great difficulty in obtaining detailed information which he required for the preparation of his graduation thesis. Thirty years after graduation he told of his experience: "In the thesis just referred to, it was desirable to give the statistics of the results obtained from certain surgical operations as applied in the treatment of epilepsy. To find these data in their original and authentic form required the consulting of many books, and to get at these books I not only ransacked all the

libraries, public and private, to which I could get access in Cincinnati, but for those volumes not found here (and these were the greater portion), search was made in Philadelphia, New York and elsewhere, to ascertain if they were in any accessible libraries in this country.

"After about six months of this sort of work, and correspondence, I became convinced of three things. The first was that it involves a vast amount of time and labor to search through a thousand volumes of medical books and journals for items on a particular subject, and that the indexes of such books and journals cannot always be relied on as a guide to their contents. The second is, that there are in existence somewhere, over 100,000 volumes of such medical books and journals, not counting pamphlets and reprints.

And the third was, that while there was nowhere in the world a library which contained all medical literature, there was not in the United States any fairly good medical library, one in which a student might hope to find a large part of the literature relating to any medical subject, and that if one wished to do good bibliographical work to verify the references given by European medical



*The largest medical library in the world: The Army Medical Library in Washington, D. C. The building was erected in 1887.  
—The Military Surgeon, April, 1936.*

ical writers, or to make reasonably sure that one had before him all that had been seen or done by previous observers or experimenters on a given subject, he must go to Europe and visit, not merely one, but several of the great capital cities in order to accomplish his desire.

"It was this experience which led me, when a favorable opportunity offered at the close of the war (1865) to try to establish, for the use of American physicians, a fairly complete medical library, and in connection with this to prepare a comprehensive catalog and index which should spare medical teachers and writers the drudgery of consulting 10,000 or more different texts, or of turning over the leaves of as many volumes to find the dozen or so references of which they might be in search."

How well he succeeded in his task those of us who frequently use the *Index Catalogue* well know. While he had contemplated the preparation of a detailed index for a long time, when he came to the execution of his plan, he sought the ideas of many men in many lands. In 1876 he prepared a "Specimen Fasciculus of a Catalogue of the

National Medical Library, under the Direction of the Surgeon-General, U. S. Army." This was submitted for suggestions and criticisms to physicians, librarians and bibliographers in all parts of the civilized world, and by 1880 was ready for publication, with practically the same arrangement and detail which characterizes it today. Money for its publication was voted by Congress, largely through the efforts of Dr. Abraham Jacob, the nestor of American pediatricians.

The *Index Catalogue* has grown with the library. The current year marks the beginning of the fourth series. It is now supplemented by the *Quarterly Cumulative Medical Index*, published by the American Medical Association, and these two publications make available for immediate reference the medical literature of the entire world, from the rare incunabula of the fifteenth century to the latest current journal.

Intimately associated with Dr. Billings for many years was Dr. Robert Fletcher (1823-1912), a native of Bristol, England. The second series of *Index Catalogue* was almost entirely the work of Dr. Fletcher who remained with the library until his death in his ninetieth year. The late Fielding H. Garrison quoted Dr. Fletcher in discussing the difficulties which arise in such an enormous undertaking as the preparation of the catalog, a task which Osler called "gargantuan": "Fletcher likened the *Index Catalogue* to a vast metropolitan hotel containing story after story of rooms and suites of rooms of all sizes and prices, adapted to the tenants of every degree of income and worldly place. In such a caravansary, some subjects like Labour, Surgery, Water Supply, etc., are old wealthy patrons having a permanent claim upon apartments of vast extent, occupying an entire floor. Others, such as Acupuncture, Amulets, Animism, are on such a slender financial footing that they must put up with hall bedrooms or be 'cabined, cribbed, confined' in the attic. Others, such as Arteriosclerosis, Bacteriology, Parasitology, Pellagra, Poliomyelitis, were once poor and needy, but, having come up in the world acquire extensive suites, with rooms perchance for even maid and courier. Others, such as many modern drugs, diagnostic tests, and surgical procedures, are bounders and get-rich-quick parvenus, who exhaust their substance in vain and vulgar show, fading away as soon as their credit is gone." But the editors have always chosen with discrimination and any lodger in the great hostelry has always received the accommodations which he deserved.

Of the magnitude of the library Dr. Billings, in 1881, in an address before the International Medical Congress in London, said: "If the entire medical literature of the world, with the exception of that which is collected in the United States, were now to be destroyed, nearly all of it that is valuable could be reproduced without difficulty."

But great as it is, magnificent as it is, necessary as it is to the very existence of the medical pro-

fession of America, the library has more than once been threatened by political machinations, and efforts have been made to merge it with the Library of Congress and to change its policies and its managements. As long ago as 1883, the Medical Society of Pennsylvania petitioned Congress to erect a building adequate and appropriate to house the Surgeon-General's Library. (It was so-called until recently. The official designation now is the Army Medical Library.) The resolution, prepared by Samuel D. Gross, read: "This Society strongly deprecates any change from the present management of the Library and Museum, and, above all, the severing of these collections by the merging of the power in the National Library as destructive to its utility." Passage of the resolution was moved by W. W. Keen and Silas Weir Mitchell. It might be well to sound a note of warning in these troublous times of state medicine and paternalism and watch carefully that some apparently harmless "rider" does not carry with it legislation inimical to the library.

Dr. Billings has had many able successors among the twelve men who have followed him as librarians of the Army Medical Library, but no discussion of the institution would be complete without mention of the late Colonel Fielding H. Garrison. The present librarian, Major Edgar Erskine Hume, says of him: "In 1891, the year following his graduation as a Bachelor of Arts at the Johns Hopkins University, a young man entered the Library as an assistant. Those were the days when it was possible to study medicine in the evening after having devoted the day to other work, and this youth of twenty-one so spent his time. His work at night earned his M.D. at Georgetown University in 1893, but what he learned during office hours from Billings and Fletcher was probably of yet greater value to him. Endowed with a keen intellect, a remarkable memory, tremendous industry, and methodical habits, Fielding H. Garrison became a man of encyclopædic learning, says Colonel Ashburn. He is best known for his History of Medicine (4 editions), but his work in medical bibliography was no less important. He enrolled in the first Plattsburg Camp and when the United States entered the World War he was commissioned a Major in the Medical Corps, continuing his work at the Library. He was retired from active service as a Colonel in 1930, after nearly forty years of service at the Army Medical Library, and thereafter until his untimely death in 1935, was librarian of the Welch Medical Library of the Johns Hopkins University, a position which Dr. Welch asked him to fill. Those who have read his erudite papers, which numbered about two hundred, need not be told of the charm and skill of his writing."

The late William H. Welch considered the Army Medical Library and its *Index Catalogue* the greatest contribution of America to medical knowledge. Probably the vast majority of us do not take full

(Continued on Page 510)

## THE SOUTH BEND SESSION

### GREETINGS!

As a reader of this JOURNAL, you are a prospective visitor to South Bend during the Convention of your Indiana State Medical Association, October 6, 7, and 8, 1936.

We take this opportunity to urge you to spend those few days in South Bend, where the citizens are warmly cordial to the visitor within their gates. Members of conventions which we have entertained, both state and national, have left our city assuring us that they have enjoyed one of the best sessions they have ever attended, both from an educational viewpoint and that of personal enjoyment. We want you to feel the same at the close of your meeting, and in the following pages we will endeavor to give you some of the interesting facts concerning the city which you will visit, in the hope that it will assist you in making your time here both profitable and enjoyable.

#### YOUR HOST

Volumes could be written about your host, the St. Joseph County Medical Society, but space does not permit. Dr. J. B. Berteling, who is considered the historian of the Society, could, no doubt, write for days on the interesting history and events in the life of this society, but we will give you only a brief resume:

The St. Joseph County Medical Society was organized on May 30, 1887, and unlike many earlier similar organizations in the county, withstood the pangs of outrageous fortune and maintained itself uninterruptedly until now it is one of the foremost medical societies in Indiana. For a long time quarterly meetings were held in the Y. M. C. A., but a permanent meeting place has been arranged in the Public Library. The local organization possesses one of the best medical libraries, not only of



Dr. David Bickel  
Chairman State Com-  
mittee on Arrange-  
ments



Dr. John Hilbert  
Chairman Local Com-  
mittee on Arrange-  
ments

this state, but of many states. Since its organization with a handful of physicians and surgeons, many of the "old guard" have gone on, their places to be filled by some of their own following in their footsteps, or by skilled representatives of this fine profession from all over the United States, trained in universities here and abroad, until at the present time the members of the St. Joseph Medical Society represent the best in the profession.

South Bend considers itself exceedingly fortunate and highly honored to be served by such a group.

#### HISTORICAL SOUTH BEND

The first known white man to visit what is now South Bend was Father James Marquette who in 1675, with a little band of Indians, journeyed from northern Illinois to the shores of Lake Michigan.

Four years later, in 1679, Rene Robert Cavelier sieur de la Salle, with a group of thirty men and eight canoes, followed on an eventful exploration trip and finally succeeded in making a treaty with the Miami Indians who at that time occupied this section of the St. Joseph valley.

The pioneer white settler was Pierre F. Navarre, an educated Frenchman who moved from Michigan in 1820 and established a trading post for the American Fur Company. He built the first habitation for a white man in South Bend and lived there until his death in 1864.

Alexis Coquillard was the first white man who came to South Bend with the intention of making it his permanent abode. He came in 1823 as an agent for John Jacob Astor's American Fur Company, and established a permanent trading post. His descendants still are residents of this city. Other white settlers came until there were 168 in 1831. South Bend was first incorporated as a town on October 3, 1835, and as a city in 1865.



Jefferson Plaza  
Where all sessions will be held

Markers of historic spots of interest may be seen just north of the city on the Portage Highway, and between the Riverview and Highland Cemeteries, indicating the spot where Marquette and LaSalle traversed our territory. In Highland Cemetery, Council Oak, under which it is said LaSalle signed the treaty with the Indians, spread its mighty branches until the summer of 1934 when a severe windstorm destroyed its aged beauty. Only a short distance from this historical tree, Knute Rockne, the famous Notre Dame coach, is buried.

Pierre F. Navarre's log cabin still stands in Leeper Park.

#### COUNTY SEAT OF GOVERNMENT

South Bend is the county seat of St. Joseph county, and derives its name from the fact that it is located on the most southerly bend of the St. Joseph River which has its source in Michigan, flows in a southwesterly direction until it reaches South Bend, then turns and flows north, emptying into Lake Michigan at St. Joseph, Michigan. This river supplies water power to many industries along its banks and to hydroelectric plants owned by public utilities which supply electric light, power and heat to this great St. Joseph Valley.

Three court houses have been erected; the last, at the southwest corner of Main and Washington Streets, houses the offices of the county government. The court house that preceded it was moved in 1897 to 112 South Lafayette Boulevard where it now serves as the home of the Northern Indiana Historical Museum, and it contains many interesting exhibits, records, and articles relative to the history of South Bend and St. Joseph County. It is open to visitors without charge on Tuesday, Thursday, and Saturday.

#### A HIVE OF INDUSTRIAL ACTIVITY

Today South Bend's population is 104,193 (19.0



Council Oak in Highland Cemetery, around which much of South Bend and St. Joseph County history centers

U. S. census figures) and is the home of many world-renowned industries, manufacturing articles too numerous to mention. However, among the most prominent you will find automobiles, trucks, automotive and airplane equipment and accessories, agricultural machinery and equipment, men's wear, electric sewing machines, lathes, lacquers, paints and varnishes, wooden and reed toys, artificial baits and rods. To this list could be added several hundred articles essential to modern living, many of which are shipped to all parts of the world, and which you use in your everyday life.

To have attracted its numerous industries South Bend, of course, must have presented an excellent industrial picture. Let us look at that industrial picture for a moment. The city is centrally located to the raw material markets of the United States and Canada. It has excellent distribution facilities, being serviced by five steam lines, one electric line, and numerous motor freight lines extending into the surrounding territory. Industrial gas and electric power is available at very reasonable rates. A well-trained diversified industrial labor market is available as well as common labor in abundance.

#### GOOD LIVING CONDITIONS

Living conditions of the community are of the best. An adequate zoning law, pure artesian water from 100 deep well pumps, and a watchful City Health Department maintain excellent sanitary conditions which give South Bend a fine national health rating. Public utilities and sewers are carried to all homes and places of business as quickly as the demand is created. Paved streets are built as fast as requested. Home owners abound in the city, and in every section you will find well-kept lawns and neat and well cared for homes. Whether the home belongs to an executive or a laborer, it represents the best in its class. South



Hotel Oliver



One of many lovely residential streets

**Come to South Bend, October 6, 7, and 8!**



Hotel LaSalle



Hotel Hoffman



Chain o' Lakes Golf Course, where the golfers will meet Tuesday, October 6th

Bend is a city of individual homes, there being comparatively few apartments or duplex homes.

An up-to-date police and fire alarm signal system gives protection to the city. A municipally owned airport accommodates the air mail, and the regular air passenger service for the city, as well as the flying schools and flying visitors to and from our city. South Bend has long been noted for its continued excellent administration of public affairs, where the people get 100 per cent for each taxable dollar spent; business men always have served as officers in the administration. Banking and financial facilities are well taken care of, and newspapers are in keeping with the standards of a city of over 100,000 people.

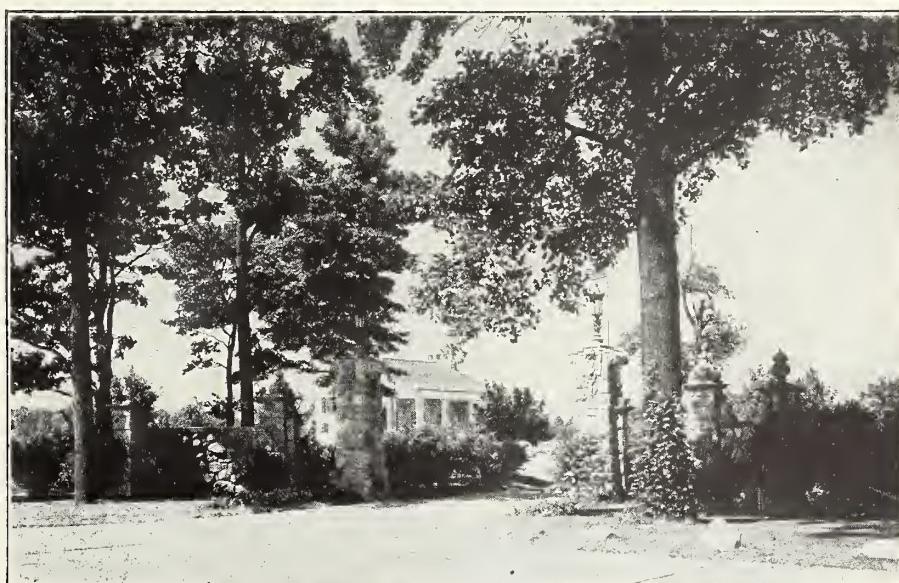
A new Federal building, completed early in 1934, houses the postal service, federal courts, offices of the South Bend Military District, recruiting offices, internal revenue department, and also functions as the home of any special governmental activity.

Commercially, South Bend has kept apace of the times and new buildings in the loop area are of the type which makes our skyline metropolitan in appearance.

#### EDUCATION AND RELIGIOUS FACILITIES

The city has an excellent school system providing elementary courses, junior and senior highs as well as vocational training. New schools have been built and those already constructed have been adequately equipped to meet every demand for modernization in curriculum. Efficient business colleges augment the public school system and train many pupils from the various communities in Northern and Central Indiana as well as lower Michigan.

The world famed University of Notre Dame for young men adjoins the city on the north and in addition to an extensive curriculum offers the visitor many interesting features with its beau-



Entrance to Erskine Park and a beautiful 18-hole municipal golf course



Air view  
of South  
Bend,  
St. Joseph  
River and the  
Power Dam  
in the  
background



South Bend Bait Company plant

Bendix  
Municipal  
Airport  
for  
passenger  
and  
mail  
service



tiful paintings, church and museum. It can be reached by automobile, or the Notre Dame street car, and a guide will be furnished at the main building office to show you about the premises.

St. Mary's College and Academy for girls, north on U. S. 31, is located in a beautiful setting along the St. Joseph River and offers an interesting place to visit. City bus or automobile will take you there.

Sight-seeing trips planned for Tuesday, October sixth, will include these schools which add greatly to South Bend's prestige in the world at large.

There are nearly 100 churches of various denominations in the city and everyone can find his particular place of worship without any inconvenience of time or transportation service.

The Public Library, Main and Wayne Streets, is open daily (except Sunday) from 9 a. m. to 9 p. m. and has four branches advantageously located in other sections of the city. An industrial and business department is located at 116 West Wayne street.

#### RECREATIONAL FACILITIES

Thirty-four parks located strategically about the city provide recreation and beauty spots and supervised play programs during the summer months. Tennis, ice-skating and coasting are enjoyed in season. A zoo and outdoor ovens for cooking are maintained at Pottawatomie Park, and offer entertainment for both children and adults.

Playland Amusement Park with concessions, dancing, picnic grounds, playgrounds and a swim-

ming pool is a popular place from Decoration Day to Labor Day each year.

The South Bend Country Club, seven miles west of the city, is a private club offering golf, horseback riding, swimming, and the recreations offered by such a club. The Coquillard Club east on U. S. 20 is a beautiful private club with golf and club house services.

South Bend has two municipal golf courses, a nine hole course at Studebaker Park and an eighteen hole course at Erskine Park which is said to be one of the most beautiful courses in this part of the country.

A number of beautiful theaters in the loop area offer further relaxation and amusement to the public.

#### HOSPITALS AND TRAINING SCHOOLS

The St. Joseph and Epworth hospitals, with the best of medical service and modern equipment, and the Children's Dispensary, specializing in children's diseases and deformities, are worthy and helpful additions to the city. The hospitals operate training schools for nurses in connection with their institutions.

The Healthwin hospital, located four miles north of South Bend on the banks of the St. Joseph river, is a beautiful institution of the pavilion type, devoted to handling the problems of tuberculosis for the community. St. Joseph's Hospital of Mishawaka, Indiana, is another excellent hospital located in the metropolitan area of South Bend and offering general medical service to the two communities.



Air view of Notre Dame University, with Rockne Stadium in the background



Air view  
of  
Notre Dame  
University  
with bowl in  
foreground.  
Notre Dame, Ind.,  
adjoins  
South Bend  
on the  
northern boundary  
line

SOUTH BEND WILL WELCOME YOU  
AS A MEMBER OF THE INDIANA  
STATE MEDICAL ASSOCIATION



Air view  
of the  
Studebaker  
Corporation,  
manufacturers  
of the  
well known  
automobile



St. Joseph Hospital, South Bend

The Community Fund, Inc., is the operative organization for 19 charitable associations which make one yearly campaign for funds, eliminating the constant solicitation which would be experienced otherwise.

#### **VARIED AGRICULTURAL PRODUCTS**

South Bend is in the center of what is probably the greatest peppermint growing district in the world, and is surrounded by a number of small farms providing hay, grains, and doing dairying and trucking and raising small fruits and berries.

Directly to the north lies the peach, apple, melon and small fruit district of southern Michigan; a great deal of the produce is trucked into this territory, providing a splendid market service for our citizens. A large producers' market makes direct buying by the housewife possible.

All of the foregoing has contributed to the growth of South Bend from its visitation by early explorers to its present area of 19.84 square miles, population of 104,193, and metropolitan population of 146,569. The altitude of the city is 657.82



St. Joseph Hospital, Mishawaka



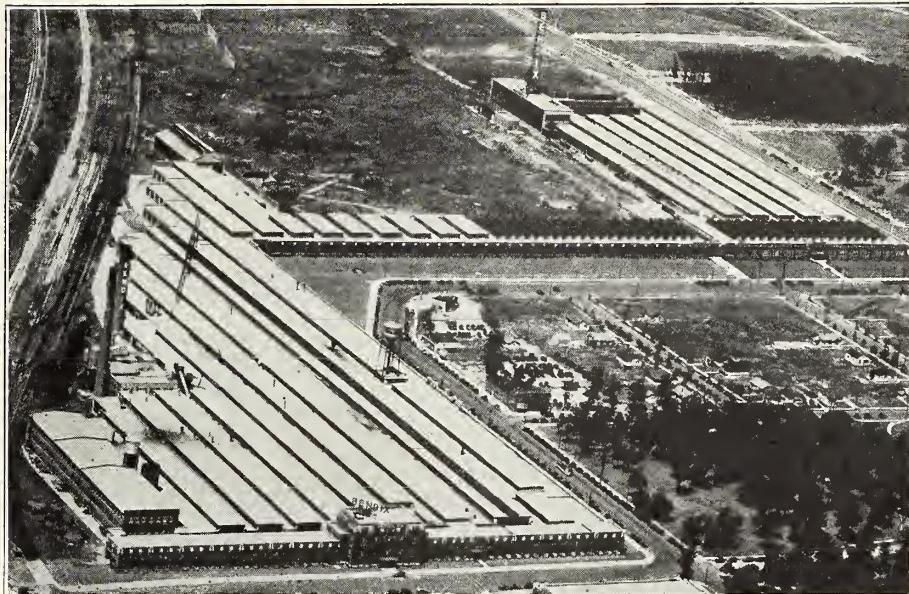
Healthwin Hospital for Tuberculosis



Children's Dispensary in South Bend



Epworth Hospital in South Bend



Air view of Bendix Products Corporation plant, manufacturers of passenger and truck automobile brakes, automotive and aircraft carburetors.

feet above sea level (elevation of city datum plane). The average winter temperature is 28 degrees, and average summer temperature is 70.2 degrees. Temperature and weather conditions should be at their best at the time of your visit.

The South Bend Chamber of Commerce, which has prepared this article for your information, will place its facilities at your disposal throughout the convention, and will be glad to serve you.

*South Bend, Indiana,  
August 6, 1936.*

*Dear Fellow Hoosier:*

*It won't be long now! Everything is being arranged in a ship-shape way for that big meeting here in South Bend, October 6th, 7th, and 8th.*

*Some of the committee members have worked so hard on this project that it was necessary to send them away on a month's*

*vacation, and they were no weaklings either. They can take it!*

*It is my understanding that in order not to take advantage of the handicap of playing on their own course, all local brothers are either not playing any more golf until October 6th, or they are playing on strange courses. Now, what could be more fair?*

*The ladies are again reminded not to bring their knitting, because the local gals are not holding themselves accountable for dropped stitches.*

*Our biggest problem has been to keep local advertising down to a place where we would still have space to write up the big show.*

*Be good until October 6th, and don't overwork!*

*Yours,  
Convention Bill.*



*South Bend Rifle Range. There will be trap and skeet shooting for those who are interested.*



ROSCOE LOYD SENSENICH, M.D.

President

Indiana State Medical Association

1936



EDMUND D. CLARK  
President-Elect  
Indianapolis



THOMAS A. HENDRICKS  
Executive Secretary and  
Managing Editor of The Journal  
Indianapolis



A. F. WEYERBACHER  
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CLEON A. NADE  
Chairman, Executive Committee  
Indianapolis



H. H. WHEELER  
Executive Committee  
Indianapolis



O. O. ALEXANDER  
Executive Committee  
Chairman of Council  
Terre Haute



E. M. SHANKLIN  
Editor The Journal  
Hammond



W. C. MOORE  
Chairman, Section on Surgery  
Muncie



A. S. GIORDANO  
Chairman, Section on Medicine  
South Bend



E. E. HOLLAND  
Chairman, Eye, Ear, Nose  
and Throat Section  
Richmond



C. N. COMBS  
Chairman, Section on Anesthesia  
Terre Haute



PAUL BEARD  
Secretary, Section on Surgery  
Indianapolis



L. G. ZERFAS  
Secretary, Section on Medicine  
Indianapolis



RAYMOND CALVERT  
Secretary, Eye, Ear, Nose  
and Throat Section  
Lafayette



LILLIAN MUELLER  
Secretary, Section on Anesthesia  
Indianapolis



F. T. ROMBERGER  
Editorial Board Member  
Lafayette



ERNEST RUPEL  
Editorial Board Member  
Indianapolis



THURMAN B. RICE  
Editorial Board Member  
Indianapolis



PIERCE MACKENZIE  
Editorial Board Member  
Evansville



L. P. HARSHMAN  
Editorial Board Member  
Fort Wayne

## ANNOUNCEMENTS

WEAR your official badge which you will receive when you register.

MEMBERSHIP CARDS will aid in speeding registration. If you have paid your dues only recently and have not yet received your membership card, present a receipt from your county society secretary and you will be permitted to register. *Please have your pocket cards with you to avoid delay.*

ESSAYISTS, please remember that all papers presented before the meetings of the Indiana State Medical Association become the property of the Association and, therefore, are not to be published or submitted for publication elsewhere than in THE JOURNAL of the Indiana State Medical Association.

REGISTER immediately upon your arrival. The registration desk will be conveniently located in the convention hall—Jefferson Plaza.

HOUSE OF DELEGATES: The first meeting of the House of Delegates will be held at four o'clock in the afternoon on Tuesday, October sixth, in the main convention hall of the Jefferson Plaza.

COUNCILORS will have their first meeting at two o'clock in the afternoon, Tuesday, October sixth, in a committee room of the Jefferson Plaza.

## ANNUAL BANQUET

THE ANNUAL BANQUET will be served at 7:30 p. m., in the dining hall of Notre Dame University, Wednesday evening, October seventh.

PHI BETA PI Alumni Association will have a luncheon meeting at the Oliver Hotel in South Bend, October 7th, at 12:30 p. m.

## HOTEL RESERVATIONS

The St. Joseph County Medical Society is very anxious that every member and his guests attending the convention in October in South Bend be provided with hotel accommodations which are entirely satisfactory. Reservations have been sent in by many of the members during the past two months, which we appreciate. Reservations we receive first will be provided with the more desirable rooms at the rates the member wishes to pay. Let us urge you to use the coupon for requesting the accommodations you will need.

You will be notified promptly of your reservation, and you can then look forward to attending the convention, knowing that you will have comfortable accommodations.

Send the coupon today!

ALFRED ELLISON, M.D.,  
Chairman, Hotel Committee.

## The Following Hotels Offer Accommodations at Rates Quoted:

Hotel Oliver: Single, \$2.50; double, \$4.00; twin beds, \$4.50 (and up). Detached bath, single, \$2.00; double, \$3.50.

Hotel Hoffman: Single, \$2.50 to \$3.50; double, \$4.00 to \$5.50; twin beds, \$4.50 to \$7.00.

Hotel LaSalle: Single, \$2.00 to \$3.00; double, \$3.50 to \$5.00. Detached bath: single, \$1.50; double, \$2.50.

Hotel Jefferson: Single, \$2.25 to \$2.75; double, \$3.00 to \$3.50; twin beds, \$4.00 to \$5.00. Detached bath: Single, \$1.50 to \$2.00; double, \$2.00 to \$3.00; twin beds, \$3.00 to \$3.50.

Hotel Morningside: Single, \$2.00; double, \$3.00. Detached bath: Single, \$1.50; double, \$2.00.

Hotel Robertson: Single, \$2.00; double, \$2.50. Detached bath: Single, \$1.50; double, \$2.00.

LaSalle Annex: Single, \$1.75; double, \$2.50.

Mishawaka Hotel (in Mishawaka): Single, \$2.00 to \$2.50; double, \$3.50. Detached bath: Single, \$1.50; double, \$2.00.

Four Flags Hotel (Niles, Mich.): Single, \$2.50; double, \$3.50.

## Send Request for Reservations to

Alfred Ellison, M.D..  
826 Sherland Building,  
South Bend, Indiana.

Please reserve hotel accommodations as indicated below. I expect to arrive in \_\_\_\_\_.

South Bend \_\_\_\_\_.

Prefer Hotel \_\_\_\_\_.

Room requirements \_\_\_\_\_ (*single, double, twin beds*)

Rate requested \_\_\_\_\_.

Name \_\_\_\_\_.

Address \_\_\_\_\_.

All officers of fraternity and class reunion groups who plan to have luncheon meetings Wednesday noon, October seventh, during the Eighty-seventh Annual Session of the Indiana State Medical Association in South Bend, please communicate IMMEDIATELY with Dr. A. D. Huffman, chairman of the Fraternity and Class Reunion Committee, 718 Sherland Building, South Bend, Indiana.

Adequate arrangements can be guaranteed for such get-togethers only if these officers supply detailed information as to number of attendants.

## GOLF AT SOUTH BEND!

**PRIZES FOR EVERYBODY!**

**COME AND GET THEM!**

### Where

At Chain o' Lakes, South Bend Country Club, South Bend, Indiana.

### When

Tuesday morning, October 6. 9:00 a.m. The tournament will consist of eighteen holes, medal play. U. S. G. A. rules.

### Luncheon

Luncheon will be from 12:00 to 1:00 p.m. at the South Bend Country Club.

### Fees

Green fees and luncheon, \$2.00. The course is in marvelous condition; all watered fairways. It is one of the recognized outstanding courses in the middle west.

### Trophies

1. First, second, third and fourth low gross.
2. Net prizes will be drawn by lot in order to eliminate any inequality of handicaps. You will not need your handicap card for the tournament.
3. Other awards will be determined later. There will be approximately twenty-five prizes.

### General Information

There will be plenty of lockers and caddies at the

club house.

You will be able to secure all of this information and specific directions to the South Bend Country Club at the various information bureaus, registration booth, and the lobbies of the various hotels in South Bend.



We would like to have the largest tournament ever held by the State Association.

You will be missing something if you do not plan to come to South Bend for the Golf Tournament on Tuesday, October 6, at 9:00 a.m.

### Route to Chain o' Lakes, South Bend Country Club.

Out Lincoln Way West (Route 20); turn left at the first gravel road (indicated by sign) after leaving city limits. Continue on this road and turn left at the first concrete road (about 3 miles). Cross interurban and New York Central Railroad tracks, and turn right at entrance of club.



## ENTERTAINMENT—AND HOW!



*Forget all this!*

"Eight hours for the worship of God, eight hours for our usual avocation and eight hours for refreshment and play" . . . should constitute the daily doings of a gentleman.

It is the third division of the day that the entertainment committee of the St. Joseph County Medical Society is planning.

ON TUESDAY EVENING, THE SIXTH OF OCTOBER, 1936, BEGINNING AT 8:30 P.M., THE ANNUAL STAG PARTY OF THE INDIANA STATE MEDICAL ASSOCIATION WILL BE HELD IN THE ROOMS OF THE COLUMBIA CLUB IN SOUTH BEND.

In conformity with the above exhortation, we hope that every doctor will be supplied with bountiful refreshments. Free beer and other gastronomic embellishments will be available in quantity.

It is to be hoped that the classes of '05, '10, '15, '18, etc., will gather en masse around their respective tables and reminisце to their heart's content.

If the participants of this type of entertainment are not satisfied, a series of fencing contests will be held featuring the Notre Dame fencing team which has successfully toured the east, engaging in combat with other schools which maintain this type of athletic activity.

In addition to this entertainment, there will be five bouts of boxing with some of the best amateur boxers in the State of Indiana. South Bend has long been a boxing center of outstanding note. We have been lucky enough to engage several state and national champions who will pit their skill against equally able boxers.

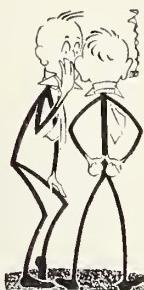
A departure from the exhibition of pulchritude has been taken for various reasons.

If any of the visiting brothers care to play poker or play for a few minutes with the galloping dominoes, ample opportunity will be provided.



*STOP! If you wanna see a real show—well, be there!*

The St. Joseph County Medical Society is extremely anxious to make this the playtime of the annual state meeting. We are more than willing to go on record as saying that we will guarantee a "hot time in the old town" on Tuesday night, October 6.



An extra supply of ice has been ordered for big heads, to make them shipshape for the Wednesday scientific session.

**F. R. Nicholas Carter, M.D.,**

Chairman, Entertainment Committee.

*"They tell me this will be SOME entertainment! I'll see you there!"*

**BE THERE! SOUTH BEND — OCTOBER 6, 7, 8!**

## OFFICIAL PROGRAM

## ANNUAL SESSION

## INDIANA STATE MEDICAL ASSOCIATION

## JEFFERSON PLAZA, SOUTH BEND, INDIANA

October 6, 7, and 8, 1936

(Schedule will be carried out on Central Standard Time)

Monday Evening, October 5, 8:00 p.m. Executive Committee Meeting, Oliver Hotel

WEDNESDAY, OCTOBER 7, 1936

## TUESDAY, OCTOBER 6, 1936

## Morning

## Morning

8 a.m. to 6 p.m. Registration, convention hall, Jefferson Plaza.

8 a.m. to 6 p.m. Opening of scientific and commercial exhibits, convention hall, Jefferson Plaza.

9:00 a.m. Annual golf tournament. Eighteen holes, low gross and handicap medal play, South Bend Country Club. (Fee, \$2.00, including green fee and luncheon.)

## Noon

12:15 p.m. Golfers' and trap shooters' luncheon, South Bend Country Club.

## Afternoon

1:30 p.m. Guests may take their choice of the following two sightseeing trips:

- (1) Trip through the Studebaker, Bendix and South Bend Bait Company plants.
- (2) Trip through St. Mary's and Notre Dame and its art galleries, and tea at St. Mary's, 3:00 p.m.

Busses will leave from the Jefferson Plaza.

2:00 p.m. Council meeting, committee room, Jefferson Plaza.

2:00 p.m. Annual trap shooting tournament, South Bend Country Club.

4:00 p.m. Meeting of House of Delegates, main convention hall, Jefferson Plaza.

## Evening

6:45 p.m. Dinner for women physicians, South Bend Country Club. Transportation will be provided. Per plate, \$1.50.

**Beulah Cushman, M.D., Chicago.**  
Subject: "Experiences in India." (Illustrated.)

8:30 p.m. Smoker and stag party, main convention hall, Jefferson Plaza. Award of golf and trap shooting prizes.

8 a.m. to 6 p.m. Registration continues, convention hall, Jefferson Plaza.

8 a.m. to 6 p.m. Scientific and commercial exhibits, convention hall, Jefferson Plaza.

GENERAL MEETING, MAIN CONVENTION HALL,  
JEFFERSON PLAZA

9:00 a.m. Call to order by R. L. Senenich, M.D., South Bend, president, Indiana State Medical Association.

Invocation, Reverend Charles T. Baillie, First Presbyterian Church, South Bend.

Greetings and introduction of president of St. Joseph County Medical Society, J. E. McMeel, M.D., by D. A. Bickel, M.D., chairman of state Committee on Arrangements.

Introduction of local chairman of Committee on Arrangements, J. W. Hilbert, M.D.

9:10 a.m. Address of welcome by Mayor George W. Freyermuth.

9:15 to 9:45 a.m. President's address, R. L. Senenich, M.D., South Bend.

## Scientific Program

9:45 to 10:15 a.m. **Byrl Raymond Kirkin, M.D.**, Associate Professor of Radiology, University of Minnesota, Graduate School of Medicine, Minneapolis-Rochester, Minnesota.

BYRL R. KIRKIN

Subject: "Roentgenologic Features of Acute Pulmonary Affections."

**Abstract:** A presentation of case histories and roentgenologic manifestations of common acute pulmonary affections, including broncho-pneumonia, pneumonitis, atelectasis, localized pneumothorax, and infarction.

10:15 to 10:45 a.m. **Lincoln Fleetford Sise, M.D.**, Boston, Massachusetts.



LINCOLN F. SISE

Subject: "Present-Day Anesthesia."

**Abstract:** Present-day anesthesia is much more complex than formerly, but is much more adaptable and efficient. Anesthesia with the gases no longer results in oxymia, even though its cost has been reduced to that of ether, and its power materially increased. Spinal anesthesia will readily cover operations of two hours or more, and with less danger. The intratracheal method precludes respiratory obstruction and makes possible assured control of inhalation anesthesia at a distance from the patient's head. Prolonged intravenous anesthesia is highly satisfactory.

Many hospitals lack the personnel and equipment to utilize these advantages, and surgeons fail to realize the possible benefit to their surgery. Hospitals should have a trained physician anesthetist at the head of a Department of Anesthesia, with physicians, and sometimes technicians, under him. Education is needed to supply beginning demand for trained and experienced personnel.

10:45 to 11:15 a.m. **Russell Lafayette Cecil, M.D.**, Professor of Clinical Medicine, Cornell University Medical College, Ithaca, New York, and Professor of Internal Medicine, New York Polyclinic Medical School and Hospital, New York.



RUSSELL A. CECIL

Subject: "The Early Diagnosis and Treatment of Pneumonia."

**Abstract:** The modern method of handling a pneumonia involves:  
1—Early clinical diagnosis before frank signs have appeared. The diagnosis should be made from the history and early symptoms, with the help of x-ray if necessary.

2—Early bacteriologic diagnosis making use of the Neufeld method of typing. By this method the type of pneumonia can be determined within an hour or so after the sputum reaches the laboratory.

3—Early and adequate serum treatment. When patients with pneumococcal pneumonia are treated early with homologous serum, the following phenomena are frequently observed:

a—The disease may be completely aborted, the temperature and the pulse and respiration rate dropping to normal within twelve to twenty-four hours after the administration of serum.

b—Striking improvement in the patient's general condition, due to the disappearance of toxemia.

c—Early serum treatment prevents the spread of infection from one lung to another, and even limits the area of infection in the lobe primarily infected.

d—Bacteremia is prevented or, if already present, is quickly checked.

e—The leukocytes rapidly return to normal.

f—Homologous agglutinins, precipitins and protective bodies promptly make their appearance in the circulating blood.

g—Skin tests become positive to the homologous polysaccharid.

h—The death-rate is cut one-half to two-thirds in the types for which serum has been employed.

11:15 to 11:45 a.m. **Frederick A. Coller, M.D.**, Professor of Surgery, University of Michigan Medical School, Ann Arbor, Michigan.



F. A. COLLER

Subject: "Water Metabolism."

**Abstract:** The importance of maintaining a fluid balance of the sick surgical patient is generally recognized. The paper is a discussion of the normal physiology of water balance, the sources of water loss in the surgical patient during operation and in the immediate postoperative period; the influence of disease on water loss, with special reference to fever, infections, and hyperthyroidism is brought out; the types of fluid to be used for parenteral administration under various disease conditions is discussed.

Noon (Wednesday, October 7)

12:30 p.m. Fraternity, class and ex-service men's luncheons and get-togethers, at Hotels. Specific announcements will be made later. All luncheons will be \$1.00 per plate.

Annual luncheon and business meeting, Indiana Roentgen Society. E. M. VanBuskirk, M.D., Fort Wayne, presiding; J. N. Collins, M.D., president-elect; H. H. Inlow, M.D., vice-president; C. C. Taylor, M.D., secretary-treasurer. Meeting to be held at Oliver Hotel.

Afternoon (Wednesday, October 7)

## SECTION MEETINGS

### MEDICAL SECTION

Chairman, A. S. Giordano, South Bend  
Vice-Chairman, E. M. VanBuskirk, Fort Wayne  
Secretary, Leon G. Zerfas, Indianapolis

(Main Convention Hall, Jefferson Plaza)

2:00 to 2:20 p.m. **Lail C. Montgomery, M.D.**, Muncie.  
Subject: "Asthma Due to House Dust."

**Abstract:** A series of cases of asthma is presented in which house dust was considered to be largely, or in part, the responsible allergen. The diagnosis was based in each case on a careful history, suitable skin tests with stool allergens, and subsequent skin tests using extracts of dust from the patient's home or place of work.

A group of normal individuals is presented as control material and a group of patients manifesting allergic disease other than asthma is presented for comparative purposes.

This series of cases suggests that in a large percentage of asthmatics, house dust is the causative allergen. It is shown that sensitivity to house dust is not commonly found in normal individuals nor in cases presenting other forms of allergic disease.

Treatment was carried out in the majority of these cases by means of extracts prepared from dust from the patient's home. In addition to specific treatment, the patients were placed on a good hygienic routine. The results of treatment are discussed. It is shown that the majority of patients received marked benefit from treatment. In some cases, a period of relief was followed by a gradual return of symptoms. In a smaller number of cases relief was only partial, and in an occasional case, no benefit was obtained.

Further study over a longer period of time will be necessary before a proper evaluation of the efficacy of treatment can be reached.

2:20 to 2:30 p.m. Discussion: M. K. Miller, M.D., South Bend.

2:30 to 2:50 p.m. **B. M. Edlavitch, M.D.**, Fort Wayne.  
Subject: "Diabetes Mellitus as a Comparatively Simple Clinical Problem."

**Abstract:** Lowered carbohydrate tolerance demands restriction of carbohydrate intake. Maintenance diet must be supplied, preferably without insulin, but with it if necessary. Diabetes in the first half of life invariably requires insulin; in the second half it may or may not, depending on severity. Proper diet, with or without insulin depending on severity of case, can maintain the diabetic in uniformly good condition. Teaching the diabetic to understand and properly to manage his or her condition is the sine qua non in the treatment. Complications, precomatose, and comatose states result from negligence or error in management. Coma is not so utterly hopeless as in the pre-insulin period. Surgery entails too much danger to be undertaken unless strictly unavoidable. Insulin is the only remedy of real value when and if needed. Preliminary report on clinical experience with insulin-prothrombin.

2:50 to 3:00 p.m. Discussion: H. L. Cooper, M.D., South Bend.

3:00 to 3:20 p.m. **J. T. Witherspoon, M.D.**, Indianapolis.

**Subject:** "The Physiology of the Anterior Pituitary Hormones and Their Clinical Application."

**Abstract:** Experimental physiology is the pace-maker for correct interpretations in clinical medicine. During recent years the physiology of the anterior pituitary hormones has played an ever-increasing and important role in this respect. The present paper discusses some of the properties of these hormones, their mode of action and their experimental physiological results. Separately are discussed the growth hormone and its relation to dwarfism, gigantism and acromegaly; the gonadotropic hormones and their relation to menstrual disorders, pregnancy and sterility; the lactogenic hormone and its bearing on milk secretion; the thyrotropic hormone and its relation to hypo- and hyperthyroid states; and the interrenotropic or metabolic hormones and their relation to carbohydrate and fat metabolism.

3:20 to 3:30 p.m. Discussion: **M. V. Kahler, M.D.**, Indianapolis.

3:30 to 3:35 p.m. Election of section officers.

3:35 to 3:55 p.m. **Chester A. Stayton, M.D.**, Indianapolis.

**Subject:** "Clinical Diagnosis in Contrast with X-ray Diagnosis."

**Abstract:** The extent, location and pulmonary complications of lung pathology are more accurately estimated by proper x-ray examination than by any other method. In pneumonic disease of the lungs, clinical localization is often impossible until the effects of the disease can be shown by x-ray.

Extensive nasal sinus pathology or lung pathology are demonstrable by x-ray when there are no localized clinical symptoms of disease. Such silent pathology frequently is an etiological factor in arthritis, pseudo-arthritis, myositis, chronic constipation with gastric symptoms and headaches, unexplained nervousness and chronic bronchial trouble.

X-ray examination of bones removes all guess work. Roentgen study of the stomach and colon is the only practical method of examining the mucosal anatomy for organic disease.

3:55 to 4:05 p.m. Discussion: **B. E. Ellis, M.D.**, Indianapolis; **Lyman R. Pearson, M.D.**, Indianapolis.

4:05 to 4:25 p.m. **Paul J. Fouts, M.D.**, Indianapolis. **Subject:** "Pernicious Anemia and Its Treatment."

**Abstract:** Pernicious anemia is one of the few diseases for which we have a specific and, in many ways, spectacular treatment. At the present time it is believed that there is no reason why patients having pernicious anemia without marked cord lesions cannot live out their normal expectancies if they receive sufficient amounts of potent material at all times. The more common symptoms referable to the three major systems (hematopoietic, gastrointestinal, and central nervous) involved by this disease will be discussed as to frequency, prognosis, and treatment.

4:25 to 4:35 p.m. Discussion: **B. G. Keeney, M.D.**, Shelbyville.

4:35 to 4:55 p.m. **John Eric Dalton, M.D.**, Indianapolis.

**Subject:** "Pregnancy Complicated by Syphilis."

**Abstract:** Upon the material available through a clinical study of all pregnant syphilitic women entering the William Cullen Hospital during the last few years, certain deductions are made concerning the proper handling both of such mothers and their offspring.

4:55 to 5:05 p.m. Discussion: **H. F. Beckman, M.D.**, Indianapolis; **F. R. N. Carter, M.D.**, South Bend.

Afternoon (Wednesday, October 7)

### SURGICAL SECTION

**Chairman, W. C. Moore, Muncie**  
**Vice-Chairman, George Green, South Bend**  
**Secretary, Paul Beard, Indianapolis**

(Ballroom, Third Floor, Jefferson Plaza)

2:00 to 2:20 p.m. **James F. Balch, M.D.**, and **William N. Wishard, Jr., M.D.**, Indianapolis. **Subject:** "The Surgical Aspects of Hematuria."

Kidney—James F. Balch, M.D.

**Abstract:** Hematuria is a definite omen of impending disaster. The various conditions which may cause a renal hematuria are discussed. Renal neoplasms behave differently and require variations in surgical removal. Renal tuberculosis may assume various pictures in different individuals requiring careful study as well as meticulous surgical technique. Renal calculus taxes the best judgment of any surgeon due to the many different types encountered. Traumatic rupture of the kidney usually should be treated with conservatism. Indications for surgery are considered.

Bladder—William N. Wishard, Jr., M.D.

**Abstract:** Gross hematuria originating from the bladder may be classified etiologically as due to lesions resultant from (1) bladder or prostatic neoplasms; (2) trauma; (3) inflammatory causes. Clinically, hematuria may be classified on the basis of (1) cases needing immediate treatment (i. e., evacuation of blood and measures designed to stop bleeding), and (2) cases suitable for elective diagnosis and treatment.

Accurate diagnosis of cause of hematuria, past or present, is imperative. Symptomatic treatment of hematuria not followed by subsequent attempt at exact diagnosis is inadequate.

Diagnostic measures as well as conservative and surgical treatment are discussed.

2:20 to 2:30 p.m. Discussion: **Sam W. Litzenberger, M.D.**, Anderson.

2:30 to 2:50 p.m. **O. O. Alexander, M.D.**, Terre Haute. **Subject:** "Postoperative Thrombophlebitis."

**Abstract:** Biochemical and physical factors of this complication discussed, stress being laid upon the physical factors, chiefly stasis. The advent of spinal anesthesia into common usage owing to its likelihood of increasing operative and post-operative stasis, may be a causative factor in the increase of postoperative thrombophlebitis. Possible methods of prevention will be discussed.

2:50 to 3:00 p.m. Discussion: **R. G. Ikins, M.D.**, Lafayette.

3:00 to 3:20 p.m. **Don F. Cameron, M.D.**, Fort Wayne. **Subject:** "Intestinal Obstruction Due to Gallstones." (Report of three cases.)

#### Abstract:

1. The purpose of this report is to emphasize the frequency of gallstone ileus and the need for its early recognition.

2. There is given herewith the history and operative findings in two such cases with recovery and subsequent x-ray study of the gallbladder. A third case seen only at autopsy also is reported.

3. In sixty-one cases of mechanical ileus, excluding strangulated hernias, operated on by the author, the obstruction was caused by gallstones in two instances, a frequency of 3.3%. Due mainly to the early recognition of the obstruction, both of these cases recovered. During this same period, 144 gallbladder operations were performed. This frequency of incidence and the increasing mortality following delayed recognition is emphasized by a review of the current literature. In the Quarterly Cumulative Index Medicus covering the past nine years, there are no less than fifty references to articles on gallstone ileus.

4. The gallstones gain entrance to the intestinal tract through a fistula from the gallbladder. The shortest diameter of the obstructing calculus is about one inch. Apparently larger stones seldom gain entrance to the bowel and smaller ones do not cause obstruction. X-ray study of one case seven years after operation shows the gallbladder to fill and empty normally.

5. A gallstone ileus should be strongly suspected in any patient, especially a woman, in whom an acute small bowel obstruction develops suddenly after an exacerbation of chronic gallbladder disease.

3:20 to 3:30 p.m. Discussion: Franklin E. Hagie, M.D., Richmond.

3:30 to 3:50 p.m. **W. D. Little, M.D.**, Indianapolis.  
Subject: "Traumatic Aneurysms of the Extremities."

**Abstract:** A general discussion of the problems involved in these conditions. A few case histories will be presented with lantern slides to illustrate the chief points of interest. In conclusion the early treatment of arterio-venous aneurysm is urged in order to avoid the crippling effect of prolonged venous obstruction.

3:50 to 4:00 p.m. Discussion: R. N. Bills, M.D., Gary.

4:00 to 4:20 p.m. **M. D. Wygant, M.D.**, Mishawaka.  
Subject: "The Use of Non-Padded Plaster Casts to the Leg and Foot."

**Abstract:** Non-padded plaster casts were used in a variety of cases; fractures of foot, leg and thigh, joint injuries, osteomelitis and osteoporosis. Good setting and immobilization of the fractures aided union and muscle function. Joints were in better condition after the casts were off. Patients appreciated being able to walk the greater part of the disability period. Motion pictures demonstrate cases using the walking bar.

4:20 to 4:30 p.m. Discussion: William Donald Davidson, M.D., Evansville.

4:30 p.m. Election of section officers.

#### SECTION ON OPHTHALMOLOGY AND OTOLARYNGOLOGY

Chairman, E. E. Holland, Richmond  
Vice-Chairman, Howard Hill, Muncie  
Secretary, Raymond Calvert, Lafayette

(Columbia Club Room, Second Floor, Jefferson Plaza)

2:00 to 2:20 p.m. **C. P. Clark, M.D.**, Indianapolis.  
Subject: "Intraocular Tumors."

**Abstract:** Sections will be presented of various intraocular tumors. A brief discussion will be given concerning their histological and clinical appearances. The three tumors that will be briefly discussed are glioma, melanotic sarcoma, and metastatic carcinoma. A liberal discussion is invited of the unique experiences that have occurred in your practice.

2:20 to 2:30 p.m. Discussion: E. W. Dyer, Jr., M.D., Indianapolis.

2:30 to 2:50 p.m. **B. N. Lingeman, M.D.**, Crawfordsville.  
Subject: "The Acute Mastoid."

**Abstract:** The etiology, symptoms, differential diagnosis and treatment will be discussed, with some attention paid to the question as to whether operation, when indicated, should be performed early or late.

Acute mastoiditis is not like acute appendicitis and need not, as a rule, be rushed to the operating room for fear of rupture. A few days of thorough study and localization of the process will be amply rewarded by quicker convalescence and fewer mistakes. No hard and fast rules can be given as to the proper time to operate. The positive indications for opening the mastoid will be given as well as the doubtful ones. Also the value of x-ray in diagnosis will be discussed, and some x-ray pictures to illustrate different cases will be shown.

Preventative measures, such as the removal of tonsils and adenoid and early paracentesis will be stressed.

Acute mastoiditis is one of the most frequent and important condition to confront the family physician and specialist and it should be promptly recognized and efficiently handled.

2:50 to 3:00 p.m. Discussion: L. L. Nesbit, M.D., Anderson.

3:00 to 3:20 p.m. **E. L. Bulson, M.D.**, Fort Wayne.

Subject: "Vitreous Opacities: Etiology, Diagnosis and Treatment."

**Abstract:** Opacities in the vitreous may be embryonic in origin, or they may occur as a result of local causes or general disease. The various etiological factors are enumerated and several cases are reported. The treatment depends on the underlying cause, and the local and general treatment are discussed.

3:20 to 3:30 p.m. Discussion: E. O. Alvis, M.D., Indianapolis.

3:30 to 3:50 p.m. **H. C. Wurster, M.D.**, Mishawaka.

Subject: "Cerebrospinal Rhinorrhea."

**Abstract:** Patient with cerebrospinal rhinorrhea undiagnosed for period of almost five years.

Rarity of condition. Scarcity of cases reported.

Symptoms are discussed. Diagnosis depends upon analysis of fluid.

Interesting features of the case reported. Recommendations and prognosis.

3:50 to 4:00 p.m. Discussion: E. L. Rigley, M.D., South Bend.

4:00 p.m. Election of section officers.

#### SECTION ON ANESTHESIA

Chairman, Charles N. Combs, Terre Haute  
Vice-Chairman, George Rosenheimer, South Bend  
Secretary, Lillian Mueller, Indianapolis

(Recreation Room, Jefferson Plaza)

2:00 to 2:20 p.m. **George M. Rosenheimer, M.D.**, South Bend.

Subject: "Comparative Study of the Complications and Deaths of 2,000 Anesthetics."

**Abstract:** Complications of anesthesia may include any untoward reactions manifested by the patient from the beginning of the administration of the anesthetic until the termination of treatment for that condition for which the patient was anesthetized. It may manifest itself within a few seconds after the beginning of the anesthetic, or it may cause disability or death, days, weeks or months later.

Statistics generally do not mean very much to anyone except the person who compiles them. However, if they are honestly compiled, and well explained, they should be valuable to others for comparison.

The data for this paper was obtained during the operation, from postoperative visits and from the clinical records.

There were 2,035 anesthetics; of which 46.8% were Ethylene, 38.05% Nitrous oxide; 11.45% Ether; 3.8% Spinal, and 4% Avertin.

The total cases by services were as follows: 20 Dentals; 173 Ear, Nose, and Throat; 10 Eye; 31 Genito-Urinary; 788 Gynecology and OB's; 1,013 General Surgery.

The percentage of cases with postoperative complications in the whole series of 2,035 anesthetics, by systems, is as follows: Respiratory, 21.5%; Circulatory, .33%; Genito-urinary, 17.6%; Gastro-intestinal, 28.7%; Nausea and Vomiting, 50.8%; Central nervous system, 58.4%.

There were fifty-four postoperative deaths in this series of cases, with one anesthetic death, and of the remaining, forty-four deaths occurred within the first week, and nine in the second to fourth week.

2:20 to 2:30 p.m. Discussion: Roy A. Geider, M.D., Indianapolis.

2:30 to 2:50 p.m. **L. F. Sise, M.D.**, Boston, Mass.  
Subject "Anesthesia for Thyroid Surgery."

**Abstract:** The chief anesthetics which have been used or suggested for goiter surgery are ether, the gasses, and local or regional anesthesia. Ether is too toxic. Local anesthesia is trying to the patient, limits the freedom of the surgeon, and is upsetting to thyrotoxic and thyrocardiac patients. The gasses are well tried and proven. Of these nitrous oxide is definitely inferior, except in combination, while cyclopropane is probably superior, though it is not yet so thoroughly tested and proven.

Preliminary medication should be used freely with thyrotoxic and thyrocardiac patients. Anoxemia, labored breathing, and accumulation of carbon dioxide should be avoided. To this end a free airway should always be maintained by means of an artificial airway. The intratracheal method should be used whenever tracheal obstruction is suspected beforehand, or when obstruction occurs during operation.

2:50 to 3:00 p.m. Discussion: Goethe Link, M.D., Indianapolis.

3:00 to 3:20 p.m. **Richard B. Stout, M.D.**, Elkhart.  
Subject: "Spinal Anesthesia; Correlation of Theory and Practice."

**Abstract:** The cardinal physical factors governing mass movement of procain solutions in the spinal canal are:

I—Specific gravity.

II—Force of injection.

III—Position of patient.

IV—Volume.

Other physical factors are of no practical significance. The many superficially dissimilar popular methods of inducing spinal anesthesia are analyzed and found to be based on different combinations of the same physical factors.

Ephedrine, when used prophylactically in dosage proportional to height of anesthesia, safely and effectively immunizes blood pressure fall and avoids dangerous sequelae. Criticism and arguments against use of ephedrine are analyzed and discussed.

Technical difficulties, complications and fatalities are discussed and means of prevention outlined.

3:20 to 3:30 p.m. Discussion: F. T. Romberger, M.D., Lafayette.

3:30 to 4:00 p.m. Round table discussion of anesthetic problems, led by Charles N. Combs., M.D., Terre Haute.

4:00 p.m. Election of section officers.

### WEDNESDAY EVENING, OCTOBER 7, 1936

7:30 p.m. Annual banquet, dining hall, Notre Dame University.

Presiding officer, R. L. Sensenich, M.D., president, Indiana State Medical Association.



J. H. J. UPHAM

Posthumous presentation of certificate of merit to Walter J. Leach, M.D., president 1935, Indiana State Medical Association, by H. C. Ragsdale, M.D., Bedford, councilor of Third District.

**J. H. J. Upham, M.D.**, Columbus, Ohio, president-elect, American Medical Association.  
Subject: "Changing Times in Medicine."



GORDON LAING

**Gordon Laing, Ph.D.**, Professor in the University of Chicago and General Editor of the University Press.

Subject: "Are Doctors Human?"

(Dr. Laing is a graduate of the University of Toronto and of the Johns Hopkins University. He has been a lecturer in Bryn Mawr College, Annual Professor in the American Academy in Rome, Sather Professor in the University of California, Dean of the Faculty of Arts in McGill University, Montreal, and Dean of the Division of the Humanities in the University of Chicago from 1923 to 1935. He is now Professor in the University of Chicago and General Editor of the University Press. As a vice-president of the American Institute of Archaeology, he has taken an active part in the work of that organization and has often lectured before its various societies. He appears frequently as a lecturer in the fields of education and literature, and as after-dinner speaker at conventions of lawyers, doctors and educators.)

### THURSDAY, OCTOBER 8, 1936

7:00 a.m. House of Delegates breakfast meeting, Rotary Room, mezzanine floor, Oliver Hotel. Annual election of officers and selection of convention city for 1937. Meeting of Council immediately following adjournment of House of Delegates, Rotary Room, Oliver Hotel.

8 a.m. to 12 noon. Registration continues, convention hall, Jefferson Plaza.

8 a.m. to 12 noon. Scientific and commercial exhibits, convention hall, Jefferson Plaza.

### GENERAL MEETING, MAIN CONVENTION HALL,

JEFFERSON PLAZA

9 to 9:30 a.m. **Fred Lyman Adair, M.D.**, Mary Campan Ryerson Professor of Obstetrics and Gynecology, The School of Medicine of the Division of the Biological Sciences, University of Chicago, Chicago.



FRED LYMAN ADAIR

Subject: "The Cervix Uteri."

**Abstract:** The uterine cervix undergoes very marked developmental changes associated with age, which are closely related to its physiologic purpose.

There are certain abnormal conditions which are related to its embryonic origin, such as congenital erosion and duplication of the cervical canal. The diseases of the cervix during pre-maturity are largely those due to infection, as neoplasms are unusual. During maturity, pathologic conditions arising from infection and trauma usually associated with sexual activity, pregnancy and parturition are commonly seen. Neoplastic diseases occur not infrequently during the later years of sexual maturity. During post-maturity the results of previous infection and trauma may persist, but retrogressive changes and neoplastic diseases predominate. These conditions are not infrequently complicated by various inflammatory processes.

The pathologic focus in the cervix serves as a starting point for the spread of various infections and neoplasms to contiguous and even remote regions of the body.

9:30 to 10:00 a.m.



LEE WALLACE DEAN

**Lee Wallace Dean, M.D.**, Professor of Otolaryngology, Washington University School of Medicine, St. Louis, Mo.

Subject: "Nasal Sinus Disease of Infants and Young Children."

**Abstract:** *The relationship between purulent nasal sinusitis and systemic diseases in infants and young children. The etiology of naso sinusitis; its diagnosis; its treatment. A moving picture demonstration of the methods of treating acute purulent nasal sinusitis in infants and young children will be given.*

10:00 to 10:30 a.m.



FRANCIS E. SENEAR

**Francis Eugene Senear, M.D.**, Professor of Dermatology, University of Illinois College of Medicine, Chicago.

Subject: "Early Diagnosis of Syphilis and Its Treatment."

**Abstract:** *The importance of early diagnosis in the determination of prognosis in early syphilis. Methods to be employed with consideration of usefulness and limitations of sero-diagnostic methods in this state. Variations in course of disease and determination of amount of treatment required as shown by comparison of results of cases in which treatment was instituted at relatively early and late dates. Discussion of various recommended methods of treatment, with comparative results. Adequacy of treatment in the control of syphilis, and variations in course of disease depending upon the amount and kinds of treatment employed.*

10:30 to 11:00 a.m.



E. L. SEVRINCHAUS

**Elmer Louis Sevrinchaus, M.D.**, Associate Professor of Medicine, University of Wisconsin Medical School, Madison, Wisconsin.

Subject: "Endocrine Therapy in General Practice."

(No abstract received.)

11:00 to 11:30 a.m.



JOHN A. TOOMEY

**John A. Toomey, M.D.**, Associate Professor of Pediatric Contagious Diseases, Western Reserve University School of Medicine, Cleveland, Ohio.

Subject: "A Critical Evaluation of Recent Advances in the Prophylaxis and Treatment of Contagious Diseases."

**Abstract:** *A discussion of all of the recent advances in the prevention and treatment of contagious diseases. This will include a discussion on the efficacy of the Dick test, scarlet fever antitoxins, diphtheria antitoxin, B. diphtheriae gravis, whooping cough vaccines and endo-antigens, and consalescent serums for the various contagious and infectious diseases.*

## SCIENTIFIC EXHIBIT

ERNEST RUPEL, M.D., DIRECTOR  
CLYDE G. CULBERTSON, M.D., ASSISTANT DIRECTOR

THOMAS G. HULL, Director, Bureau of Exhibits, American Medical Association, in charge of:

- I. Cutaneous Manifestations of Syphilis.
- II. Cutaneous Granuloma.
- III. Histopathology of Syphilis.
- IV. INDIANA STATE BOARD OF HEALTH, Verne K. Harvey, M.D., director.
- V. CHICAGO TUBERCULOSIS ASSOCIATION, Bayard G. Keeney, M.D., in charge.
- VI. INDIANA PHARMACEUTICAL ASSOCIATION, Carl E. Nelson, chairman, Professional Contact Committee. Exhibit prepared by the Notre Dame University School of Pharmacy.
- VII. NOTRE DAME UNIVERSITY, Department of Bacteriology. "Raising of Guinea Pigs Under Aseptic Conditions." Prof. J. A. Reyniers.
- VIII. INDIANA UNIVERSITY SCHOOL OF MEDICINE, Division of Plastic Surgery. Harold M. Trusler, M.D.
- IX. INDIANA UNIVERSITY SCHOOL OF MEDICINE, Department of Dermatology. John E. Dalton, M.D.
- X. BRONCHIOGENIC CARCINOMA, Osborne A. Brines, M.D., Detroit, Michigan.
- XI. METROPOLITAN LIFE INSURANCE COMPANY, Louis I. Dublin, in charge.
  1. Geographic Variation in Mortality from Cardiovascular-Renal Diseases.
  2. Mortality from Cardiovascular - Renal Diseases Compared with Other Causes.
  3. Chances of Eventually Dying from These Conditions.
  4. Differential Mortality by Color, Sex, Age and Occupation.
  5. Trend of Mortality by Age, 1911-1935.
  6. Future Mortality in United States from These Conditions.
- XII. NEW FRACTURE TABLE, Richard B. Stout, M.D., Elkhart.
- XIII. THE INCIDENCE OF BIRTH RATE AND CESAREAN SECTION IN SOUTH BEND, David A. Bickel, M.D., and Nicholas Carter, M.D., South Bend.
- XIV. PATHOLOGIC ODDITIES AND ANOMALIES OF BONE, R. B. Acker, M.D., South Bend.
- XV. SIMPLE ROUTINE LABORATORY EXAMINATIONS IN A DOCTOR'S OFFICE, South Bend Medical Laboratory.
- XVI. PNEUMOCOCCUS TYPING. METHOD OF COLLECTING SPECIMENS AND RESULTS OF SERUM TREATMENT, South Bend Medical Laboratory.
- XVII. PHOTOGRAPHIC EXHIBITS OF PATHOLOGICAL SPECIMENS, South Bend Medical Laboratory.

- XVIII. CARDIOLOGIC EXHIBIT, C. A. Bishop, M.D., South Bend.
- XIX. UROLOGIC EXHIBIT, C. C. Hyde, M.D., South Bend.
- XX. X-RAY EXHIBIT, Indiana Roentgen Society.
- XXI. ST. JOSEPH COUNTY FRACTURE COMMITTEE, Alfred Ellison, M.D., South Bend.
- XXII. PSYCHO-BIOLOGICAL PSYCHIATRY, Douglas Owen, M.D., South Bend.
- XXIII. WOMAN'S AUXILIARY, INDIANA STATE MEDICAL ASSOCIATION, Mrs. Carl Schoen, New Albany, Indiana.
- Press and Publicity, Mrs. E. E. Padgett, Indianapolis.
- Public Relations, Mrs. J. Crede Miller, Frankton.
- Hygeia, Mrs. A. C. Rettig, Muncie.
- Program, Mrs. Ernest O. Nay, Terre Haute.
- Habits, Mrs. Carl Schoen, New Albany.
- Pioneer Memorial, Mrs. O. G. Pfaff, Indianapolis.
- Reports of presidents of county auxiliaries.
- Report of national meeting at Kansas City, Mrs. Edmund D. Clark, Indianapolis.

**PROGRAM FOR WOMEN'S ENTERTAINMENT AND WOMAN'S AUXILIARY TO THE INDIANA STATE MEDICAL ASSOCIATION**

**Tuesday, October 6, 1936**

- 9 a.m. to 6 p.m. Registration, convention hall, Jefferson Plaza.
- 10 a.m. to 12 m. Sightseeing tour of South Bend in Studebaker busses.
- 1:30 p.m. Guests may take their choice of following trips:  
 (1) Through Studebaker, Bendix, and South Bend Bait Company plants.  
 (2) St. Mary's, Notre Dame and Art Galleries and Tea at St. Mary's.
- 3:00 p.m. Tea, St. Mary's College. Lecture by Sister Madeleva, president, St. Mary's College.
- 6:30 p.m. Dinner and bridge, Rotary Room, Oliver Hotel.

3 p.m.

**Wednesday, October 7, 1936**

- 9 a.m. Breakfast and annual business meeting, Woman's Auxiliary to the Indiana State Medical Association, Chain o' Lakes Country Club. (75c.)  
 Mrs. R. L. Compton, president, presiding.

**Program:**

- Invocation—Rev. Charles Baillie, South Bend.  
 Address of Welcome—Mrs. H. L. Cooper, South Bend.  
 Response — Mrs. Maurice B. VanCleve, Terre Haute.

**Business:**

- Reading of the minutes by the Secretary, Mrs. W. E. Tinney, Indianapolis.  
 Report of Treasurer, Mrs. Clarence L. Bock, Muncie.  
 Report of Corresponding Secretary, Mrs. James C. Carter, Indianapolis.  
 Reports of State Chairmen:  
 Organization, Mrs. George R. Dillinger, French Lick.  
 Legislation, Mrs. I. N. Trent, Muncie.

**New Business:**

- Election of officers.  
 Address — Guest speaker, Charles P. Emerson, M.D., Indianapolis. Subject: "What Can the Woman's Auxiliary Contribute to the Practice of Medicine?"

Breakfast will be followed by business session. Those who wish may play golf or swim and remain for luncheon at the club. No entertainment will be planned as the business session will occupy most of the time.

Garden tour. Transportation by Studebaker busses.

Those not interested in the garden tour are invited to be guests of the Alliance Francaise where Mrs. Charles Dewey and Madame Laure will entertain them. Display of works of modern painters in the club rooms.

The Notre Dame Art Galleries will be open to all visiting women throughout the convention.

**DOCTOR:**

**TAKE THIS JOURNAL  
HOME TO YOUR WIFE.  
SHE WILL WANT TO  
KNOW THE DETAILS OF  
THIS PROGRAM.**

**COMMITTEES FOR 1936 SESSION  
INDIANA STATE MEDICAL ASSOCIATION**

*General Arrangements*—J. W. Hilbert and D. A. Bickel.

*Finance*—J. V. Cassady, D. A. Bickel, J. W. Hilbert, W. B. Christophel.

*Lantern*—L. F. Fisher, F. W. Logan, C. C. Hyde, E. M. Sirlin, Morris Balla.

*Hotel*—A. F. Ellison, George Rosenheimer, W. H. Baker, L. A. Sandoz, H. H. Rodin.

*Banquet and Entertainment (Smoker)*—F. R. Carter, Erwin Blackburn, B. A. Kamm, R. M. McDonald, P. E. Haley, W. E. Miller, M. K. Miller, E. E. Parker, F. W. Logan, J. E. Luzadder, Jr., B. J. Wyland, J. H. Zimmer, E. L. Rigley, C. D. Linton, Richard Holdeman.

*Sightseeing*—K. E. Selby, M. J. Thornton, M. E. Whitlock, R. H. Thomas, R. B. Sanderson, E. K. Ayling, W. E. Borley, J. G. Bostwick.

*Publicity*—H. D. Pyle, C. M. Sennett, R. V. Hoffman, L. P. VanRie, A. M. Sullivan, F. W. Buechner, C. F. Bussard, W. L. Spalding, H. C. Wurster.

*Golf*—K. T. Knode, C. E. Savery, H. L. Cooper, D. W. Frash, C. M. Fish.

*Trap Shoot*—F. R. Clapp, R. B. Acker, P. G. Skillern, J. L. Wilson, G. B. Crumpacker, B. M. Hutchinson, J. S. Sprague.

*Registration*—H. B. Shedd, Martha Lyon, Harry Sandoz, J. M. Gordon, C. A. Bishop, C. M. Malstaff, H. L. Warrick, N. S. Lindquist.

*Automobile*—T. B. Pauszek, M. W. Hillman, Andrew Petras, Donald Grillo, W. N. DuVall, C. M. Eisenbeiss.

*Military Service*—P. C. Traver, A. L. Knapp, C. A. Thompson, H. H. Slominski, V. E. Harmon.

*Ladies' Entertainment*—P. J. Birmingham, M. D. Wygant, G. B. Allen, J. A. Duggan, L. E. Pennington, Veronica Pennington.

*Reception*—J. B. Berteling, H. F. Mitchell, E. J. Lent, J. W. Hill, R. W. Spenner, C. C. Terry, W. H. Hillman, L. A. Bolling, J. C. Boone, J. J. Hardy, Harry Boyd-Snee, A. A. Kramer, C. S. Bosenbury, L. E. How, C. R. Vickery, H. E. Vitou, E. P. Moore, W. G. Wegner, H. T. Montgomery, C. A. Dresch, F. P. Eastman, J. H. Fears, C. A. Mott, H. M. Hall, J. T. How, Carl J. Langenbahn.

*Convention Hall*—B. J. Bolka, Isadore Sandock, L. G. Frith, J. A. Abel, D. H. Condit, L. L. Frank, Marcus M. Gilman, J. B. Seaman.

*Fraternity*—A. D. Huffman, G. F. Green, H. W. Helmen, C. S. Campbell.

*Scientific Exhibit*—A. S. Giordano, Ladislaus Falatin, Marcus Lyon, C. J. Goethals, S. A. Clark, R. B. Sanderson, Ruth F. Rasmussen.

*Women Physicians*—G. D. Frith, Martha Lyon, Verna Cristophel, A. A. Wilson, Lillian Holde-  
man.

**COMMITTEES FOR WOMAN'S AUXILIARY TO THE  
INDIANA STATE MEDICAL ASSOCIATION**

*President of Auxiliary*—Mrs. Harry Cooper.

*Entertainment*—Mrs. K. T. Knode and Mrs. A. S. Giordano, general chairmen.

*Sightseeing and Tea at St. Mary's*—Mrs. David Bickel, chairman; Mrs. George Green, Mrs. M. D. Wygant, Mrs. Donald Grillo, Mrs. Thomas Pauszek.

*Dinner-Bridge, October 6th*—Mrs. James Wilson, chairman; Mrs. George Rosenheimer, Mrs. H. J. Graham, Mrs. C. Bosenbury, Mrs. I. Sandock, Mrs. Charles Goethals, Mrs. Walter Baker, Mrs. C. C. Terry, Mrs. D. H. Condit, Mrs. D. W. Frash, Mrs. H. H. Rodin, Mrs. K. E. Selby, Mrs. L. F. Fisher, Mrs. Stanley Clark, Mrs. F. R. N. Carter.

*Breakfast at Chain O' Lakes Country Club*—Mrs. Harry Helmen, chairman; Mrs. A. A. Kramer, Mrs. Robert Hoffman, Mrs. R. M. McDonald, Mrs. R. L. Sensenich, Mrs. Milo Miller, Mrs. Louis Sandoz, Mrs. Robert Aker, Mrs. C. E. Savery, Mrs. C. M. Fish, Mrs. Harry Cooper.

*Golf*—Mrs. P. G. Skillern and Mrs. V. E. Harmon.

*Publicity*—Mrs. P. J. Birmingham, chairman; Mrs. M. J. Thornton, Mrs. W. L. Spaulding, Mrs. C. A. Bishop.

*Flowers*—Mrs. F. R. N. Carter, chairman; Mrs. Stanley Clark, Mrs. A. D. Huffman, Mrs. Harry Boyd-Snee, Mrs. N. S. Lindquist, Mrs. J. B. Seaman, Mrs. H. J. Zimmer.

*Finance*—Mrs. E. Blackburn, chairman; Mrs. J. V. Cassady, Mrs. J. W. Hilbert, Mrs. J. E. Meel.

*Transportation*—Mrs. J. A. Abel, chairman; Mrs. M. M. Gilman, Mrs. G. J. Geisler, Mrs. C. F. Bussard, Mrs. Harry Sandoz, Mrs. B. J. Bolka, Mrs. C. S. Campbell, Mrs. M. W. Hillman, Mrs. H. E. Vitou, Mrs. M. E. Whitlock.

*Reservations for Hotels and Medical Headquarters*—Hotels: Mrs. A. D. Ellison, chairman; Mrs. P. E. Haley, Mrs. W. B. Christophel, Mrs. G. B. Allen, Mrs. L. L. Frank, Mrs. C. M. Sennett, Mrs. H. D. Pyle, Mrs. P. C. Traver, Mrs. R. W. Spenner. Medical Headquarters: Mrs. A. Petras, Mrs. H. H. Slominski, Mrs. F. W. Buechner, Mrs. G. B. Ayling, Mrs. H. B. Shedd, Mrs. B. J. Wyland, Mrs. W. N. DuVall.

*Hostesses*—Mrs. P. C. Traver, chairman; Mrs. F. P. Eastman, Mrs. J. B. Berteling, Mrs. James G. Bostwick, Mrs. E. R. Borley, Mrs. L. A. Bolling, Mrs. L. E. How, Mrs. W. H. Hillman, Mrs. H. M. Hall, Mrs. J. J. Hardy, Mrs. L. M. Jones, Mrs. A. L. Knapp, Mrs. F. W. Logan, Mrs. C. D. Linton, Mrs. E. J. Lent, Mrs. J. E. Luzadder, Mrs. E. P. Moore, Mrs. E. E. Parker, Mrs. R. H. Thomas, Mrs. L. P. VanRie, Mrs. W. C. Wegner, Mrs. Morris Balla, Mrs. H. C. Wurster, Mrs. H. L. Warrick.

**OFFICIAL CALL TO THE HOUSE OF DELEGATES**

The next annual session of the Indiana State Medical Association will be held at South Bend, October 6, 7, and 8, 1936.

The House of Delegates will be constituted as follows: Marion County, nine delegates; Lake County, four delegates; Allen County, three delegates; St. Joseph County, three delegates; Tippecanoe County, two delegates; Vanderburgh County, two delegates; Vigo County, two delegates; the other seventy-five county societies, each one delegate; thirteen councilors; the ex-presidents, namely: C. S. Bond, W. N. Wishard, J. C. Sexton, J. B. Berteling, Joseph R. Eastman, W. H. Stemm, C. H. McCully, W. R. Davidson, E. M. Shanklin, Charles N. Combs, Frank W. Gregor, George R. Daniels, Charles E. Gillespie, Angus C. McDonald, A. B. Graham, F. S. Crockett, J. H. Weinstein, and E. E. Padgett. In addition to these, the president, secretary, and treasurer, all without power to vote except in case of a tie, when the president shall cast the deciding vote.

Blank credentials have been sent by the secretary to each county society, and the properly executed credentials should be mailed to Thomas A. Hendricks, 1021 Hume Mansur Building, Indianapolis, or brought to the session. No delegates will be seated unless wearing the official badge.

The House of Delegates will convene promptly at 4:00 p. m., Tuesday, October 6, in the main convention hall, Jefferson Plaza, and again at 7:00 a. m., Thursday morning, October 8, in the Rotary Room, mezzanine floor, Oliver Hotel (breakfast meeting).

The order of business will be as follows:

1. Call to order by the president.
2. Roll call and seating of qualified delegates.
3. Reading of the minutes of previous meetings.
4. Appointment of reference committees.
5. Report of the executive secretary.
6. Report of the treasurer.
7. Report of the chairman of the council.
8. Reports of standing and special committees:

- (1) Credentials.
- (2) Executive.
- (3) Arrangements.
- (4) Scientific Work.
- (5) Legislation and Public Policy.
- (6) Bureau of Publicity.
- (7) Civic and Industrial Relations.
- (8) Medical Education and Hospitals.
- (9) Public Relations.
- (10) JOURNAL Publication.
- (11) Necrology.
- (12) Graduate Education.
- (13) Diphtheria Prevention.
- (14) Study of Health Insurance.
- (15) Veterans' Affairs.
- (16) Study of High School Athletics.
- (17) Township Trustees Liaison.

- (18) Lye Burns in Children.
- (19) Study of Puerperal Mortality.
- (20) State Fair.
- (21) Mental Health.
- (22) Expert Testimony.
- (23) Prevention of Traffic Accidents.
- (24) State Division of Public Health Liaison Committee to Deal with Social Security Act.
- (25) Student Debates.
- (26) Secretaries' Conference.
- (27) Control of Cancer.
- (28) Auditing.
- (29) Historian.
9. Reading of communications.
10. Reading of memorials and resolutions.
11. Unfinished business.
12. New business.
13. Adjournment.

The election of officers will be the first order of business at the second meeting of the House of Delegates. In addition to the regular officers, the terms of the following officers expire December 31, 1936, and their successors must be elected at the session: Delegates to the American Medical Association to succeed H. G. Hamer, Indianapolis, and R. L. Sensenich, South Bend, and alternates, W. F. Kelly, Indianapolis, and E. M. Shanklin, Hammond.

Delegates from the second, fifth, eighth, and eleventh districts are reminded that the terms of their councilors will expire December 31, 1936, and new councilors should be elected to succeed the following:

Second District: H. C. Wadsworth, Washington.

Fifth District: O. O. Alexander, Terre Haute.

Eighth District: M. A. Austin, Anderson.

Eleventh District: Ira Perry, North Manchester.

Some of these elections already may have been held but they should be reported to the House of Delegates at this session for confirmation.

THOMAS A. HENDRICKS,  
*Executive Secretary.*

**REPORT OF COMMITTEE ON CREDENTIALS**

*House of Delegates, Indiana State Medical Association:*

Gentlemen:

Your committee urges that every society in the state be represented at the state meeting with properly certified delegates. The postal card notification signed by the secretary of the local county medical society to the headquarters office is sufficient certification.

Respectfully submitted,

W. F. CARVER, M.D., *Chairman*  
J. W. BOWERS, M.D.  
W. E. AMY, M.D.

**REPORT OF THE EXECUTIVE SECRETARY**

*House of Delegates, Indiana State Medical Association:*

Gentlemen:

Annually the House of Delegates of the Indiana State Medical Association assembles to state and restate basic and fundamental principles, determine policies, and draft a program of procedure for the future guidance of organized medicine in Indiana. In order to determine this future course, a bird's-eye view of the changes that have taken place and a general panoramic picture showing the enlarged scope of activities and broadened fields of organization endeavor which have come about during the last ten years may be worthwhile. Hence, as an annual report from your executive secretary, a comparative review of the Association as of 1926 and as of 1936 that follows may be interesting.

**I. Membership in 1926 and 1936**

These figures perhaps more than any others disclose the growth of your Association. On August 1, 1926, there were 2,571 members, while on August 1, 1936, we have 2,762 members, a gain of 191 doctors despite the fact that the American Medical Association directory shows that 226 fewer doctors are registered in Indiana today than ten years ago. While the total membership was 2,683 for the year 1926, we may well anticipate a final year-end total bordering on 2,900 members in 1936.

**II. Annual Session**

The annual session of the Association better than any other single event during Indiana's medical year shows most graphically the growth and advancement of scientific organized medicine during the last ten years. Most of you can recall the state medical meetings of ten years ago and compare them in attendance and in the variety of activities with those of the last few years. The scientific exhibit such as was originated by Dr. Frank Wynn many years ago has been revived and is growing in proportions annually, and at this session it promises to be more elaborate than ever. The commercial exhibit has grown from less than twenty booths when it was established until this year we expect to have forty exhibit spaces occupied. Trap shooting has become an annual event along with the time-honored golf tournament. The scientific sections have increased from three to four in number and many special groups, although they do not have their own formal sections in the State Association, have at least one meeting during the state gathering.

The attendance at the 1925 annual session at Marion was 800 as compared with 1,011 in 1935 at Gary and the high all-time record for state attendance of 1,814 at Indianapolis in 1934. Indeed so large has the annual session grown that only a limited number of cities in Indiana have the facilities to accommodate the doctors, their families and their guests, the exhibitors and out-of-town visitors who make up the typical Hoosier medical get-together and gathering.

**III. House of Delegates**

Typical of the increase in the work that must be done by any group functioning for the Association at the present time as compared with 1926 is that done by the House of Delegates. In 1926 the docket for the first meeting of the deliberative body of the Association listed twenty-three subjects of business as compared to the 1936 official call to the delegates which calls for thirty committee reports alone to be considered in addition to twelve other topics, almost a 100 per cent increase over the 1926 list.

The method of conducting the business of the house has undergone a change, almost all matters coming before the house for consideration now being referred to one of the ten reference committees which are appointed and function throughout the session. It is to these committees that all resolutions and reports are referred, and it is before these committees that the battles are fought out before they are brought up for discussion on the floor of the house for final discussion and disposal.

In 1926 the official House of Delegates' Handbook contained 55 pages. This year's Handbook is expected to be larger than the 1935 manual which was 143 pages in length.

**IV. State Headquarters Office**

In 1926 the personnel consisted of a secretary and a typist, and the headquarters force was housed in a very small office in the Hume Mansur Building. Although there is nothing elaborate or "showy" about headquarters now, the visitor sees a comfortably sized outer work room, a convenient conference room in which has been placed the start of the State Medical Association library, a separate JOURNAL room, an additional space for a record and storage room, and an executive secretary's office room.

When the office of the full-time executive secretary was established late in December of 1924, it was the outgrowth and combination of the Bureau of Publicity and a part-time state secretary's office. Centralized in this headquarters office now are all the activities of the State Association. It is significant that despite this centralization of all the activities into one office, the local county medical societies, the Council and the regular and special committees of the State Association have not surrendered one iota of their rights, duties, powers, individuality or principles. The last final word, as always, and as it ever should be, remains in the hands of each local county medical society. The headquarters office fills the place occupied by the liaison outfit back in the World War days, co-ordinating the work of the individual doctor and the county medical society in the front line trenches with that of the American Medical Association back at Army headquarters.

**V. The Journal**

Ten years ago THE JOURNAL was being edited, managed and published at Fort Wayne. Since its

founding almost thirty years ago, it was the inspiration, masterpiece, "hobby," and reflection of the glory and dynamic personality of one man, its editor, Dr. Albert E. Bulson. With the death of Dr. Bulson in 1932 the entire method of management of THE JOURNAL was changed. Now it is truly the property of the Council, with an editor, a managing editor, and an editorial board named by the Council. The editor and editorial board are in charge of the editorial work of THE JOURNAL, and the executive committee is in charge of the business end of THE JOURNAL. The growth which has marked almost everything that is connected with the Association has added greatly to the size and value of THE JOURNAL. During the year of 1925, 480 reading pages were printed in THE JOURNAL as compared to 704 reading pages printed in 1935.

#### **VI. Library**

The State Association has made a notable start in establishing its own library since THE JOURNAL has been published through the headquarters office in Indianapolis. In these four years a library of 234 new volumes has been built up. These books, which come to THE JOURNAL for review, become the property of the Association and are available for loans to all members of the Association. Within the next ten years this library should be a worthwhile and valuable collection of medical books.

#### **VII. Annual Secretaries' Conference**

Rapid in growth and fruitful in its accomplishments has been the Annual Secretaries' Conference. Ten years ago this conference started as a more or less informal gathering of county medical society secretaries around a breakfast table during the state meeting at West Baden. Since that time the conference has become a separate and distinct feature of the Association with a definite purpose of discussing organization problems and a formal program of its own. Instead of being held at the time of the annual session it is now a conference in its own right with its own chairman and program committee and a day set aside for its own use in January of each year.

Some of the most important addresses on economic and social medicine by some of the outstanding national leaders and authorities on these subjects have been presented at these conferences.

#### **VIII. Graduate Education**

Ten years ago much was said about post-graduate work sponsored by the state society but little was done about it. At the present time the Indiana State Medical Association and the Indiana University School of Medicine are conducting courses, the courses of the two groups last year dovetailing one into the other, the total registration being 653, and representing practically every county in the state.

#### **IX. Historical Work**

Ten years ago no central authority for the collection, maintenance and study of historical data existed for the Indiana medical profession. Now,

under the direction of the Bureau of Publicity, this very important field of work is taken care of adequately by an official state historian and by many local county medical society historians. Articles are appearing in THE JOURNAL of the Indiana State Medical Association and particular tribute is being paid to the final resting places of Indiana's pioneer medical heroes. The Woman's Auxiliary to the Indiana State Medical Association has made the memorializing of these pioneers one of its major projects.

#### **X. Committees**

The complexity of the problems facing the profession today as compared with those of 1926 is shown by the fact that ten years ago there were fourteen functioning committees of the State Association as compared to the thirty standing and special committees at the present time, none too many to give thorough attention to the many difficult problems which a well-functioning state medical organization must face.

#### **XI. Auxiliary**

The Woman's Auxiliary to the Indiana State Medical Association which was non-existent ten years ago now has a feature position in the program of each annual session of the state organization, and in many localities it has become a strong coordinating arm of the local profession. More and more prominence is being given each year to the business meetings and entertainment features of the Auxiliary during state, district and often local meetings.

#### **XII. No Increase in Dues**

In many other state societies where the duties and activities have been stepped up to keep pace with modern developments, where the employment of additional personnel and increased office space has become necessary, as has been the case here in Indiana, the dues have been increased. In Indiana, however, no such increase has been necessary, and is not contemplated.

#### **XIII Conclusion**

We realize that comparative figures are merely indications rather than actual proof of the increased value of an organization, but we are confident that the medical profession of Indiana has fought through the depression and emerges into what we all hope are brighter times with a feeling that it is better equipped and better prepared than ever before to serve the public.

In making this casual review over a ten-year period we of course are faced with the one inevitable regret, the memory of those physicians who have died during the past decade. Many who now are gone were most influential and worked most unselfishly to build the Indiana State Medical Association to the position where it can face the future with confidence and hope.

Respectfully submitted,

THOMAS A. HENDRICKS,  
*Executive Secretary.*

## REPORT OF THE TREASURER

*House of Delegates, Indiana State Medical Association:*

Gentlemen:

The appended report of the certified public accountants, George S. Olive & Co., gives you the financial status of our organization. I do not believe any comment is necessary, except to explain that the certificates of deposit for the bonds on the Beachton Court Apartments and the Rokeby Apartment Hotel are listed as of face value in the General Fund. They have been carried there for several years in spite of the fact that they had greatly depreciated in value. They are still carried because within the past year their value has slowly increased.

Our medical defense fund was subject to rather large withdrawals, due to the fact that several old malpractice suits that had been pending were finally settled within the past year. It is gratifying to know that the number of new suits shows a decrease.

## ACCOUNTANT'S REPORT

January 8, 1936.

The Council,  
Indiana State Medical Association,  
Indianapolis, Ind.

Gentlemen:

We have examined the cash records of your association for the year ended December 31, 1935. This examination was undertaken for the purpose of determining and verifying the cash transactions for the year.

The results of our examination are presented in this report, which includes: (1) text of comments; (2) statement of assets of all funds at December 31, 1935; (3) statements of receipts and disbursements of all funds for the year ended December 31, 1935. A list of the statements is presented on the page following this text.

## GENERAL COMMENTS

In exhibit A is presented an analysis of the increase in assets of the Association for the year ended December 31, 1935, showing in summary form the sources from which this increase was derived. We have adjusted the amount of assets as shown by the previous auditor's report at December 31, 1934 to an amount of \$36,082.59, as follows:

Total assets of all funds at December 31, 1934, per previous auditor's report	\$38,919.59
General fund check to JOURNAL, shown as undeposited	\$ 14.00
Deduct:	
General fund check to JOURNAL, deposited January, 1935	12.00
Correction	2.00
Members' dues for 1935 deposited in December, 1934, taken into income in 1935	2,835.00
	2,837.00
Total assets of all funds at December 31, 1934—exhibit A	\$36,082.59

Details of the assets of all funds are presented in exhibit B. Details of the receipts and disbursements of cash in the general fund, THE JOURNAL of the Indiana State Medical Association, and the medical defense fund are presented in exhibits C, D, and E.

Yours very truly,

GEORGE S. OLIVE & CO.,  
Certified Public Accountants.

## INDIANA STATE MEDICAL ASSOCIATION

List of Statements Contained in Report on Examination  
of Cash Records, Year Ended December 31, 1935

- Exhibit A—Analysis of increase in assets, all funds, year ended December 31, 1935.
- Exhibit B—Statement of assets, all funds, at December 31, 1935.
- Exhibit C—Comparative statement of cash receipts and disbursements of the general fund, years ended December 31, 1935, and December 31, 1934.
- Exhibit D—Statement of cash receipts and disbursements of THE JOURNAL of the Indiana State Medical Association, year ended December 31, 1935.
- Exhibit E—Statement of cash receipts and disbursements of the medical defense fund, year ended December 31, 1935.

## EXHIBIT A

Analysis of Increase in Assets, All Funds,  
Year Ended December 31, 1935

TOTAL ASSETS, DECEMBER 31, 1935—	
exhibit B	\$39,457.84
TOTAL ASSETS, DECEMBER 31, 1934	36,082.59

NET INCREASE ----- \$ 3,375.25

Arising from the following sources:

Purchase of United States Treasury bonds ----- \$ 5,000.00

Excess of cash receipts over disbursements—JOURNAL of the Indiana State Medical Association, year ended December 31, 1935 ----- 702.15

Excess of cash receipts over disbursements—medical defense fund, year ended December 31, 1935 ----- 457.69

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## EXHIBIT C

Comparative Statement of Cash Receipts and Disbursements,  
Years Ended December 31, 1935, and December 31, 1934

## GENERAL FUND

	Year Ended		
	Dec. 31 1935	Dec. 31 1934	Increase —Decrease
<b>BALANCE BEGINNING OF YEAR</b>	\$ 5,313.13	\$ 2,625.89	\$ 2,687.24

## RECEIPTS:

Membership dues	19,470.00	19,141.00	329.00
Income from exhibits	1,950.00	1,792.50	157.50
Postgraduate study	74.84	124.45	—49.61

## Interest income:

United States Government Bonds	317.65	215.14	102.51
Indianapolis, Indiana, City Hospital Bonds	247.50	247.50	
Marion County, Indiana, Flood Prevention Bonds	212.50	212.50	
Ft. Wayne, Indiana, School Improvement Bonds	225.00	225.00	
Lake County, Indiana, State Highway Aid Bonds	100.00	150.00	—50.00
JOURNAL subscription		\$2.00	—2.00

Total receipts	22,597.49	22,110.09	487.40
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## BEGINNING BALANCE

PLUS CASH RECEIPTS	27,910.62	24,735.98	3,174.64
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## DISBURSEMENTS:

Transfers of applicable portion of dues to:			
THE JOURNAL of the Indiana State Medical Association—exhibit D	5,602.00	5,492.00	110.00
Medical defense fund—exhibit E	2,081.25	2,044.50	36.75
Headquarters office expense	8,535.06	8,318.11	216.95
Publicity committee	260.70	431.75	—171.05
Public policy	429.15	187.90	241.25
Council	110.85	123.29	—12.44
Officers	491.17	311.36	179.81
Annual session	1,805.01	1,720.33	84.68
Miscellaneous committees	787.99	582.20	205.79
Postgraduate study	6.90	211.41	—204.51
Premium and accrued interest on purchase of United States Treasury Bonds	272.00		272.00

Total disbursements	20,382.08	19,422.85	959.23
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<b>BALANCE OF OPERATING RECEIPTS AND DISBURSEMENTS</b>	7,528.54	5,313.13	2,215.41
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Deduct: Disbursement for United States Treasury Bonds	5,000.00		5,000.00
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<b>CASH BALANCE, END OF YEAR</b>	\$ 2,528.54	\$ 5,313.13	—\$2,784.59
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(Exhibit B) (Exhibit A)

## EXHIBIT D

## Statement of Cash Receipts and Disbursements, Year Ended December 31, 1935

## JOURNAL OF THE INDIANA STATE MEDICAL ASSOCIATION

BALANCE, JANUARY 1, 1935	\$ 1,734.19
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## RECEIPTS:

Subscriptions—members—exhibit C	\$ 5,602.00
Subscriptions—non-members	50.75
Advertising	8,689.58
Collections on accounts receivable	521.50
Single copy sales	7.00
Electrotypes	53.82
Reprints and refund	13.09

Total receipts	14,937.74
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	16,671.93
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## DISBURSEMENTS:

Editorial and management salaries	\$ 6,475.00
Expenses of editorial board	18.46
Printing	5,295.24
Postage	438.85
Electrotypes	377.43
Office rent and light	730.86
Office supplies	111.76
Advertising commissions	32.48
Press clippings	111.18
Extras—help and printing	295.44
Convention reporter	146.65
Copyright fees	14.35
Miscellaneous	187.89

Total disbursements	14,235.59
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<b>BALANCE, DECEMBER 31, 1935—exhibit B</b>	\$ 2,436.34
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## EXHIBIT E

## Statement of Cash Receipts and Disbursements, Year Ended December 31, 1935

## MEDICAL DEFENSE FUND

BALANCE, JANUARY 1, 1935	\$ 835.27
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## RECEIPTS:

Transfer of applicable portion of dues from the general fund—exhibit C	2,081.25
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	2,916.52
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## DISBURSEMENTS:

Salary of Association attorney	\$ 600.00
Malpractice fees	1,008.50
Treasurer's bond	15.00
Check tax	.06

	1,623.56
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<b>BALANCE, DECEMBER 31, 1935—exhibit B</b>	\$ 1,292.96
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Respectfully submitted,

A. F. WEYERBACHER, M.D.,  
Treasurer.

## REPORT OF THE CHAIRMAN OF THE COUNCIL

House of Delegates, Indiana State Medical Association:

## Gentlemen:

The three regular meetings which are scheduled each year for the Council of the Indiana State Medical Association have been reported in detail in the November, 1935, and the February, 1936, issues of THE JOURNAL, and hence only a brief summary of the principal actions taken by this body during the past year is herewith respectfully reported.

## First Meeting, Gary, October 8, 1935

The Council of the Indiana State Medical Association convened at a luncheon-business meeting at noon at the Hotel Gary with the chairman presiding. The roll call showed twelve councilors, the president-elect, the treasurer, the members of the Executive Committee, and the executive secretary present. The place that had been occupied by Doctor W. J. Leach, president of the Association, whose death occurred only a few days before the annual session, was left unfilled.

## Harrison Narcotic Law Violation

Correspondence from a local county medical society and the American Medical Association re-

garding a member who had been convicted of violating the Harrison narcotic law was discussed by the Council, and following a report of the case by the council or of the district of which the county medical society is a component part, the Council refused to take any action in the case as it felt it could not do so in accordance with the Constitution and By-Laws of the State Medical Association.

#### *Indigent Sick and WPA Medical Work*

Charles Marshall, director of finance of the Governor's Commission on Unemployment Relief, discussed at length the legal status of poor relief work in Indiana at the present time and stated that a WPA worker is on the same basis as any other person in a community who receives a similar income as far as the responsibility of the township trustee to pay the medical bills for services rendered such a worker is concerned. Mr. Marshall stated, "Whenever a person is unable to obtain the necessary medical care, it is up to the township trustee to see that such necessary medical aid is provided if such person can establish that he is entitled to relief as a poor person under the requirements of the statute. The medical profession should not think of a WPA worker as different from anyone else." The Council authorized the president of the State Association to appoint a liaison committee to confer with the Governor's Commission and the Township Trustees' Association.

#### *Request from Committee on Graduate Education for Funds*

The chairman of the Committee on Graduate Education requested funds to be used in obtaining outstate speakers for meetings that the Graduate Education Committee was planning upon holding in conjunction with district medical society meetings. The Council felt that the allowance of such funds would be a bad precedent to set because if the State Association pays for speakers for these meetings, all county and district medical societies might well expect the State Association, through the Committee on Graduate Education, to finance their local meetings.

#### *Editorial Board Election*

Dr. E. M. Shanklin, of Hammond, was unanimously re-elected editor of THE JOURNAL for 1936, and Dr. F. T. Romberger, of Lafayette, was unanimously re-elected a member of the editorial board to serve five years, starting January 1, 1936.

#### **Second Meeting, Gary, October 10, 1935**

The second meeting of the Council convened directly following the meeting of the House of Delegates in the Hotel Gary. Roll call showed nine councilors, the president-elect, the newly-elected president-elect, the treasurer and executive secretary present.

#### *Traveling of President*

The Council recommended that the Association presidents use their own judgment in making speaking engagements out over the state.

#### *Administration of Morphine*

Letter referred to the Council in regard to hospitals in Indiana not having registered pharmacists not being legally allowed to handle morphine. The secretary was instructed to obtain further information in regard to this.

#### **Midwinter Meeting, Indianapolis, January 12, 1936**

With twelve members of the Council, the president for 1936, the president-elect, the treasurer of the Association, the editor of THE JOURNAL, and the executive secretary of the Association present, the Council convened in the morning.

#### *Reports of Councilors and Officers*

Each councilor made a report giving information in regard to the activities and problems arising in his own district society. These reports showed the general condition of the profession throughout the state to be satisfactory.

Reports of officers were received.

Dr. R. L. Sensenich, president for 1936, spoke briefly of the plans of the State Association to hold a two-day postgraduate course in Indianapolis in the spring. He also spoke of the arrangements for the 1936 annual session at South Bend.

Dr. E. D. Clark, president-elect, said that he was heartily in accord with the program for post-graduate education.

Dr. A. F. Weyerbacher, the treasurer, reported that the Association had operated with a net increase at the end of the year of \$3,375.25 above the balance at the end of the previous year.

Dr. E. M. Shanklin, editor of THE JOURNAL, spoke of the increase in the number of reading pages in THE JOURNAL.

#### *Plans for 1936 Annual Session*

A preliminary report, along with proposals and suggestions for the 1936 annual session at South Bend October 6, 7, and 8, was presented to the Council by Dr. D. A. Bickel, of South Bend, chairman of the state committee on convention arrangements, and Dr. J. W. Hilbert, of South Bend, chairman of the local committee on convention arrangements.

The Council appropriated \$450.00 in addition to the \$400.00 allowed by the By-Laws of the Association, to pay for the expenses of the 1936 convention at South Bend.

The Council decided to continue the scientific exhibit in 1936 and to employ professional medical stenographers to take notes on the meeting.

#### *Committee Reports*

The chairmen of the various committees of the State Association gave brief reports on the activities of their committees for the past year. Additional reports were given by Dr. Verne Harvey, director of the State Division of Public Health; Dr. W. D. Gatch, dean of the Indiana University School of Medicine at Indianapolis, and Albert Stump, attorney for the Association.

***Journal Business***

The Council renewed the contract with Dr. E. M. Shanklin as editor of THE JOURNAL and went on record against accepting liquor advertisements for THE JOURNAL.

***Course in Medical Economics***

The Council went on record approving the suggestion of one of its members that the course in medical economics and ethics given in the Medical School "be enlarged to start in the junior year and be continued during the remainder of the Medical School course."

***Elections for 1936***

Dr. George Dillinger, of French Lick, was elected to serve as an alternate delegate to the American Medical Association meeting for Dr. Don F. Cameron, of Fort Wayne.

Dr. Cleon A. Nafe and Dr. H. H. Wheeler, of Indianapolis, were elected members of the Executive Committee for 1936.

Dr. O. O. Alexander, of Terre Haute, was unanimously re-elected chairman of the Council.

Respectfully submitted,

O. O. ALEXANDER, M.D.,  
*Chairman.*

***First Councilor District***

A joint meeting of the First District Medical Society and the Vanderburgh County Medical Society will be held on Tuesday evening, Sept. 8, 1936. At this meeting Dr. Howard B. Mettel will be present to tell of his work in Maternal Care and Child Welfare. Arrangements are also being made that possibly Dr. Oliver Greer will be present to explain more in detail concerning the work for crippled children in the State of Indiana.

I. C. BARCLAY, M.D., *Councilor.*

***Second Councilor District***

The various medical societies were requested to send their presidents and secretaries to a district conference at Bloomfield, Tuesday, May 16, 1936.

At this meeting questions of interest to the district were discussed and plans were made for the coming annual meeting.

The annual meeting was held on the afternoon and evening of June 16, 1936, at Washington, and was well attended. The program of the afternoon was given by Drs. R. H. Moser and H. B. Mettel, of Indianapolis. The evening lectures were made by Drs. Robert Moore and Goethe Link, of Indianapolis. The interim between the afternoon and evening session was spent at the table where an old-time Hoosier dinner was served by one of the local church groups.

The Second District meeting furthered plans for the strengthening of the district organization, and in the future the district meetings will be supported by district members and individual county

medical societies will not be responsible for the entertainment.

The number of new faces at the district meeting was noticeable. These young men welcome an insight into the state organization. It was apparent that they were all enthusiastically in favor of the medical profession leading the way in all the various new contacts with society.

H. C. WADSWORTH, M.D., *Councilor.*

***Third Councilor District***

During the past year the Third District has held two very successful meetings. The fall meeting was held at Salem and the spring meeting at New Albany. Both meetings were well attended. We were fortunate enough at each meeting to have one or more officers of the State Association present. An effort was made to have papers by members of the district supplemented by a few out-of-town speakers.

It has been the desire of the officers of the district to have the meetings in a different county each time in order to stimulate increased interest in the county. Thus far only two counties have failed to have a meeting. We hope to have them there in the near future.

The profession in this district is in much better condition than it was a year ago from an economic standpoint. Business and collections both have improved. The fear of state medicine is still with us, being increased by the recent passing of the social security laws.

H. C. RAGSDALE, M.D., *Councilor.*

***Fourth Councilor District***

The annual meeting of the Fourth District was held in Greensburg, May 20, 1936.

Papers were presented by Drs. P. C. Bentle, of Greensburg (president); W. H. Stemm, of North Vernon; M. C. McKain, of Columbus; Howard Mettel, of Indianapolis, and Louis Segar, of Indianapolis.

Dr. Max Bahr, of Indianapolis, was the speaker at the banquet in the evening. His subject was "The Nature of Mental Diseases."

Officers were elected as follows:

W. H. Stemm, North Vernon, president.

E. C. Trotter, Madison, vice-president.

D. S. McAuliffe, North Vernon, secretary.

M. C. MCKAIN, M.D., *Councilor.*

***Fifth Councilor District***

The spring meeting of the Fifth District was held at the Deming Hotel on May 1st, 1936, in conjunction with the Terre Haute Academy, with Dr. George W. Crile as guest speaker. Arrangements have not as yet been made for the fall meeting. There has been a slight increase in the paid-up membership of the component societies, and each of the societies hold regular meetings.

O. O. ALEXANDER, M.D., *Councilor.*

**Sixth Councilor District**

The sixth district has nothing of especial interest to report. Since the passage by the special session of the legislature of the so-called Social Security Act, I have endeavored to have a special meeting of each of the county medical societies in my district devoted exclusively to a discussion of it. This has been done so that every physician in the district may fully understand its provisions.

On June 9 a meeting of the Fayette-Franklin County Medical Society was held at Brookville. The meeting was well attended. The address of the evening was by Dr. W. U. Kennedy, president of the Henry County Medical Society. Dr. E. E. Padgett, of Indianapolis, also addressed the meeting.

On June 15 a meeting of the Hancock County Medical Society was held at Greenfield. This meeting was also devoted entirely to a discussion of the same subject. Dr. H. B. Mettel, of Indianapolis, discussed the social security act as it affects the medical profession in detail. Dr. W. U. Kennedy, of New Castle, made an interesting talk concerning the plight of physicians in Europe under socialized medicine.

On July 1 a special meeting of the Shelby County Medical Society was held in Shelbyville. Dr. Verne K. Harvey, secretary of the Indiana State Board of Health, discussed briefly the social security act. Dr. H. B. Mettel explained in detail the provisions of this act as it affects physicians. Dr. Kennedy, of New Castle, also made a short talk.

I am sure that these meetings have all been very informative to every physician that was fortunate enough to attend. I hope to have a meeting in every other county of this district for the same purpose some time soon. In this way we can reach practically every physician in the state.

SAMUEL KENNEDY, M.D., *Councilor.*

**Seventh Councilor District**

During the past year the Seventh District has carried on as usual. Meetings were held in the various component societies in the district according to stated schedule. Guest speakers appeared on many of these programs.

The district meeting was held in Indianapolis and Doctor Paul D. White, of Boston, was the principal speaker at the dinner. An excellent turnout was on hand. Officers were elected.

The American Medical Association has recommended that the Community Hospital in Indianapolis be registered by the Council. This is a hospital for Negroes; it has its own staff, and is now listed for inspection. This represents a needed addition to our facilities for medical care in Indianapolis.

The next district meeting will be held in Franklin on November 11 and although the program has

not been worked out in its entirety, I am pleased to report that M. Edward Davis, M.D., Chicago, associate professor of obstetrics and gynecology, Rush Medical College, University of Chicago, will be one of the principal speakers. His talk will be on obstetrics. We are expecting an excellent turnout and are promised by Doctor W. L. Porteus' committee the best of everything.

C. J. CLARK, M.D., *Councilor.*

**Eighth Councilor District**

Nothing of importance has occurred save that the officers of the district society failed to get together concerning the advisability of a Muncie meeting in May, and no meeting was held. A canvass of the Delaware, Blackford, Jay, and Randolph County Societies found an adverse opinion as to the necessity of any district meeting, while the Madison county members were responsible for its being started three years ago and desire its continuance. Without the backing of the other four societies, however, and in view of the fact that the deficit of the last meeting in Anderson amounted to nearly one hundred dollars which was assumed by the local society, the possibility of a further deficit will have to be arranged for as a district obligation before a successful meeting can be planned.

M. A. AUSTIN, M.D., *Councilor.*

**Ninth Councilor District**

Despite the fanciful vagaries of weather and politics and post-depression assaults upon our professional ideals and idealisms, everything seems to have moved quite serenely forward throughout the district during the past year. It was my happy privilege to visit nearly every county society through the year, and there were no outstanding or unsolvable problems other than those pertinent to the profession at large, some of which have been facing us these many long years.

The annual district assembly was held in Lafayette, the Tippecanoe Society being the host and acquitting itself nobly. An interesting program of scientific discussions was presented and the entertainment of the guests was well conducted. Dr. Gordon Thomas, district president; Dr. John Burkle, district secretary; Dr. Earl Van Reed, chairman of arrangements, and Mrs. G. P. Levering, chairman of the ladies' committee, together with their effective aides-de-camp, all received well entitled commendation.

FLOYD T. ROMBERGER, M.D., *Councilor.*

**Tenth Councilor District**

The past year has been an active one medically insofar as the various county medical societies are concerned.

Jasper-Newton County has held regular meetings and while small in numbers make up for this lack

in intensity of their interest and the splendid character of their programs.

Porter County entertained the Tenth District in May with a most excellent afternoon and evening session. Their regular meetings are well attended and most instructive.

Lake County has had its usual successful year, and will act as host for the District meeting in the fall. A very elaborate session is being planned.

Membership in the component societies has been well maintained and there has been a minimum of ethical problems to contend with. The individual practitioners in general have displayed an excellent disposition in cooperating with state policies and present a formidable front against the forces which attempt to undermine the principles for which organized medicine stands. There have been few malpractice suits and it is our belief that, with unemployment improvement, these will be reduced still further.

The "Grim Reaper" has been sufficiently busy in other quarters so that few deaths have occurred in our District. However, for those few, we are extremely regretful.

The Educational Committees have continued to supply speakers for lay organizations as well as items of interest from the Bureau of Publicity of the State Association to the lay press.

The Legislative Committees have been generally active in ascertaining the attitude of candidates for state offices toward the medical profession, and it is sincerely hoped that their efforts will be productive of sound, sensible representation in the coming Assembly.

Your Councilor has attended all of the meetings of the Council during the past year and has welcomed the opportunity of discussing the various accomplishments of the past and the plans for future policies, and it is a pleasure to report that the Tenth District has not lagged in interest or energy in attempting to formulate suggestions for the best interest of organized medicine.

N. K. FORSTER, M.D., *Councilor.*

#### **Eleventh Councilor District**

The Eleventh Indiana Councilor District Medical Association is, as always, in a flourishing condition. We have 191 paid members and over \$400 in the treasury.

On May 20th our spring meeting was held in Marion. A clinic was held in the morning on childhood tuberculosis. A scientific program was held in the afternoon at which Andrew L. Banyai, of Wauwatosa, Wisconsin, was the principal speaker.

Our next meeting will be in Huntington on October 28, 1936, at which time Dr. J. O. Arnold, professor of obstetrics at Temple University, will talk on Eclampsia. The writer has heard Dr. Arnold on this subject. His ideas are entirely new

and it will be well worth any doctor's time to drive from any place in Indiana to hear him.

At the Marion meeting, Dr. M. J. Lewis, of Marion, was elected president; Dr. O. G. Brubaker, of North Manchester, secretary, and Dr. I. E. Perry, of North Manchester, councilor for three years.

We still believe we have the best district society in the state.

I. E. PERRY, M.D., *Councilor.*

#### **Twelfth Councilor District**

All component county societies of the Twelfth District had a very prosperous year. Secretaries and other officers of the various societies, including the Northeastern Indiana Academy of Medicine, are very alert and met the economic condition arising in a very admirable manner for these respective societies. Nothing of unusual interest other than that which has already been published has transpired.

E. M. VAN BUSKIRK, M.D., *Councilor.*

#### **Thirteenth Councilor District**

Along with the St. Joseph County Medical Society, all of the physicians of the Thirteenth District Medical Society will welcome the profession to the eighty-seventh annual session of the Indiana State Medical Association to be held in South Bend, October 6, 7, and 8.

From an organization standpoint, the Thirteenth District has had a most successful year which we are looking forward to climaxing with a splendid state meeting.

W. B. CHRISTOPHEL, M.D., *Councilor.*

#### **REPORT OF EXECUTIVE COMMITTEE**

*House of Delegates and Council, Indiana State Medical Association:*

Gentlemen:

##### **I. Introduction**

With regular all-day meetings once a month and numerous special informal conferences several times weekly, it truly can be said that your Executive Committee this year has considered more problems than ever before in the history of the Association. Being in constant touch, as is your Committee, with the activities of the headquarters office and the general scope of work undertaken by all committees of the Association makes it difficult for us to prepare a comprehensive report without treading on the ground often covered in detail by other functioning groups of the Association, but your Committee has felt that despite this trespassing it could well touch upon the high points

of discussion and achievement in order to give all the doctors of the state in general and the members of the House of Delegates in particular an idea of some of the major problems faced by the profession during the past twelve months and what may come up during the coming year.

## II. Administrative Work

**1. Membership.** For the second successive year a membership gain has been made by the State Association, the fact perhaps which is more significant than any other in showing the rising interest of the physicians throughout the state in their own organization. The membership record since 1930 follows:

	Aug. 1	Dec. 31
1930	2,690	2,739
1931	2,729	2,767
1932	2,680	2,725
1933	2,546	2,710
1934	2,627	2,741
1935	2,699	2,807
1936	2,762	

The true significance of these figures is apparent when it is realized that the total number of physicians in Indiana, according to the figures in the 1936 edition of the American Medical Association directory recently off the press, is constantly dropping, and no special drive for members has ever been made by the State Association. The total number of physicians in Indiana, according to the last four directories of the American Medical Association follows:

1929	4,102
1931	4,073
1934	4,049
1936	4,025

When the totals are tabulated at the end of the present year undoubtedly the membership in the State Association will be the largest in the history of the Association, exceeding the 1935 total.

### 2. Battle against the Socialization of Medicine.

**(a) Situation today.** During the past five years a strenuous battle has been waged by the medical profession throughout the country against so-called sickness insurance. As this report goes to press it is the feeling of your Committee that the threat of sickness insurance is further removed at the present time than at any period since the appearance of the report of the Committee on the Costs of Medical Care. This threat has been turned aside at least for the present by the constant and unremitting efforts of organized medicine throughout the country. It is indeed with pride that your Executive Committee reports that the Indiana State Medical Association has played a leading part in this battle against sickness insurance and fought against the overthrow of the present effective system of the practice of medicine in this country.

**(b) Indiana's Place in the National Picture.** Indiana has been honored by having two of its leaders, Dr. F. S. Crockett, of Lafayette, past president of the State Association, and Dr. R. L. Senenich, of South Bend, president of the State Association, serve for the past few years as members of the Committee on Legislative Activities of the American Medical Association. Through this intimate connection with the parent organization the Indiana State Medical Association has been in a fortunate position in being able to keep in constant touch with the policies and program of the American Medical Association in regard to the subject of sickness insurance.

**(c) The Four Horsemen.** In the country in general, and in Indiana in particular, the sickness insurance picture is much better than it was even a few months ago. The Milbank Foundation has given up its intensive drive to bring forward sickness insurance. John Kingsbury is no longer at the head of that foundation. C. Rufus Rorem's group hospitalization plans carrying their threat of medical as well as hospital insurance have been found wanting in many cases. William Walsh's aggressive endeavors to establish group hospitalization in at least one Indiana city so far have been unavailing, and R. Clyde White, formerly professor of sociology and director of the Bureau of Social Research of Indiana University, after failing in his efforts to centralize completely the control of the social security administration in the hands of social service workers, is no longer in Indiana. Thus, Kingsbury, Rorem, Walsh and White, the four horsemen for socialized medicine, are facing failure to establish such a system either in America or in this state.

**(d) High School Debates.** Your officers at this point wish to congratulate Dr. Lyman T. Rawles, of Fort Wayne, and his committee and the local committees that were created throughout the state which presented so ably the viewpoint of the medical profession in regard to the question of the socialization of medicine, which was debated by many high schools throughout the state. A complete report is presented by the Committee on Student Debates. The Committee also wishes to thank Dr. Morris Fishbein, editor of *The Journal of the American Medical Association*, who attended at the request of the Association, the high school debate conference at Purdue University on December 7, 1935.

**(e) Teaching of the Socialization of Medicine in the Universities.** A subcommittee of the Executive Committee, consisting of the president, president-elect and chairman of the Council of the Indiana State Medical Association, was appointed to study the question of the teaching of the socialization of medicine in the universities of the state. This committee met with Dr. William Lowe Bryan, and it is to meet with the heads of other universities at a later date.

(f) *Economy Plan.* The cooperative plan of community medical service attempted at Economy, Indiana, and largely publicized in the papers of the state, was studied in detail by the Executive Committee. The president-elect and the executive secretary made a trip to Economy, talked with various individuals interested in the plan, and made a report to the Committee. It will be very interesting to see whether or not the plan as proposed stands up in actual practice. Your committee thinks it will not.

(g) *Enlargement of Government Hospital.* The Committee notes with concern that the hospital facilities at Fort Benjamin Harrison have been increased to take care of CCC workers who are brought to Fort Harrison for treatment from all over the state. The government, according to report, is increasing its 225 bed hospital at the fort by 9 beds which will make a total of 315 beds. This makes the Fort Harrison hospital next in size to the City and Methodist hospitals in Indianapolis. The Committee fears that this is merely another evidence of socialized medicine.

3. *Administration of Social Security Legislation.* A complete report upon the enactment of the Social Security bill and the battle with the social service workers on the one hand and the cultists on the other has been made by your Legislative Committee. The Executive Committee here merely wishes to give a brief outline of the manner in which the medical features of these statutes are being administered. Special articles covering this work have appeared from time to time in THE JOURNAL.

(a) The child and maternal welfare features of the act are under the supervision of the State Division of Public Health. This work is in charge of Doctor Howard Mettel and is directly under the supervision of the State Division of Public Health and an advisory committee composed of representatives from the Indiana State Medical Association and the Indiana University School of Medicine, Dr. James Carter and Dr. E. O. Asher serving upon behalf of the State Association, and Dr. Matthew Winters and Dr. H. F. Beckman upon behalf of the University. In accordance with the plan laid down by Dr. Mettel, the program in Indiana is to be one of education, both of the profession and the laity. No treatment is contemplated under the state program. The Executive Committee has recommended that the director be under full time employment.

(b) The crippled children feature is under the direction of Dr. Oliver Greer who, under full-time employment, is to direct this work in Indiana. He comes under the Indiana Department of Public Welfare and is advised in technical matters by a committee from the State Medical Association composed of Drs. L. A. Ensminger and L. D. Belden. As this report goes to press Doctor Greer is preparing an outline of his program which will be

sent for approval to the Crippled Children's Bureau at Washington. Representatives of the Executive Committee have conferred with Doctor Greer and with Wayne Coy, acting administrator of the Indiana Department of Public Welfare, and have made it clear that the Executive Committee feels that this work on crippled children should not be centralized in Indianapolis but should be attended to in those local communities which have adequate facilities for taking care of this crippled children work. A list of hospitals and physicians doing orthopedic work in Indiana was supplied to the State Association by William D. Cutter, M.D., secretary of the Council on Medical Education and Hospitals of the American Medical Association. This list was forwarded to the director of the crippled children's work in Indiana to serve as a guide in the establishment of approved orthopedic services to care for crippled children in compliance with the provisions of the Social Security Act. The Executive Committee also sent an informative bulletin to each county medical society secretary suggesting that he get in touch with the director and inform him as to whether or not the profession in each county is prepared and has the facilities to take care of this work locally.

(c) *Division of Physical and Health Education.* Under the Social Security Act a new division has been created and is headed by Dr. Thurman B. Rice, who has taken on this work in addition to his many other duties at the State Division of Public Health. This division will aid in health education procedures throughout the state, the object of its director being "to offer sound health teaching and stimulate discrimination in the use of health information, and to correct misinformation and mistakes given over the radio."

4. *Annual Re-registration of Physicians.* The opinion of the Executive Committee concerning this question was asked by a member of the State Board of Medical Registration and Examination. The Committee feels that when and if this subject is brought up for discussion and action by the House of Delegates, complete information in regard to re-registration fees and how the profession in other states reacts to such fees should be available. The Committee feels that some time and thought should be given to this subject before it is recommended that legislation along this line be enacted.

5. *Narcotic Regulations.* From time to time the Committee has authorized and suggested the publication in THE JOURNAL of the salient narcotic rules and regulations. A contact was made with Mr. E. A. Crews, U. S. Narcotic inspector for Indiana, in regard to this question as it concerns the profession of the state. During the year several physicians were forced to pay a penalty fee as a result of carelessness in failing to file proper narcotic reports as provided by law. The House

of Delegates of the American Medical Association has asked that each county medical society take action in dismissing any physician from the society who has been guilty of violation of narcotic regulations which carried a prison sentence. (If a man merely has had to pay a penalty fee, that is a different matter.) In at least one case in Indiana a physician has been found guilty of violating the narcotic regulations and has subsequently been imprisoned and yet he has not been suspended from his local county medical society and hence his name has been carried as a member in good standing on the rolls of the State and American Medical Associations. The American Medical Association has asked that some action be taken in such cases.

#### 6. *Indigent Sick.*

(a) During the year the federal government turned back to the individual townships the duty of taking care of relief work and the payment of relief bills. This of course included the problems in regard to the care of the indigent sick. As a result a committee was appointed by the State Association to act in cooperation with a committee from the Township Trustees' Association. This committee had several meetings and its detailed report will be brought up for consideration by the House of Delegates.

(b) Time and again Charles Marshall, director of finance, Governor's Commission on Unemployment Relief, has insisted that the medical profession should do something to cut out what he terms "chiseling by individual doctors" in matters having to do with the indigent sick and WPA workers. The Committee feels that this is a matter that should be dealt with by each local county medical society which should make it its duty to investigate and regulate any overcharging on the part of any individual physician for services rendered WPA workers and the indigent sick.

#### 7. *Health Insurance and Group Hospitalization.*

During the year new activity to establish group hospitalization in various parts of the state was in evidence but so far as is known no such plan has been established and is actually running in any city in Indiana. Upon authority of the Executive Committee an article by L. B. McCracken, head of the Medical and Dental Business Bureau of Indianapolis, entitled "Group Hospitalization vs. Hospital Expense Insurance" was published in the August issue of THE JOURNAL. This article differentiates between group hospitalization plans and straight out-and-out insurance for hospitalization. It is hoped that every physician in the state will be able to differentiate between the two as such knowledge is basic in any complete understanding of the subject.

### III. *The Journal*

1. As the Committee in charge of the business management of THE JOURNAL, we are pleased to

report that the magazine is maintaining its high standing among other journals, that its pages are increasing in worth and number each year.

Since THE JOURNAL has been published in Indianapolis, the number of pages published has been as follows:

	(Through July)			
	1933	1934	1935	1936
Reading -----	634	612	712	362
Advertising -----	358	408	428	258
	992	1,020	1,140	620

For the year 1935 THE JOURNAL published more reading pages than ever have been published in any preceding volume. The greatest number prior to 1935 was in 1931 when 704 reading pages were printed. It is the hope of the Committee to equal for 1936 the number printed in 1935 in spite of greatly increased printing costs. With the July issue, 362 reading pages have been printed, as compared with 364 printed through July of 1935. Advertising pages have increased: 248 advertising pages were printed through July of 1935 as compared with 258 through July of this year.

2. *Printing Contract.* The William B. Burford Printing Company, printers of THE JOURNAL from January, 1933, to December, 1935, felt that it could not continue without an increase in the per page rate. Bids were sought from 29 printing companies, representing all parts of the State of Indiana, and bids were received from 19 companies. Several responded to the request for bids by saying that their plants were not equipped to take care of the work. One said that his plant was filled to capacity and would not permit acceptance of a job of this size. The low bidder was given a trial with the January, 1935, issue, which proved to be fairly satisfactory mechanically, but various circumstances made it imperative to change again, and the next lowest bidder (the Evans Printing Company, Indianapolis) was employed for the February issue. This arrangement proved satisfactory and the Evans Printing Company was employed to print the remaining issues in 1936. The cost has been \$1.03 per page more than our previous contract, and the resulting increase in printing costs for THE JOURNAL will approximate \$1,160 for the year. We believe, and we hope our members will agree, that the mechanical perfection of THE JOURNAL has not diminished but rather has improved with these changes.

3. *Advertising.* Though strict rules in regard to acceptance of advertising have been constantly maintained, a steady increase in advertising pages is noted. The upward trend of business in general is reflected in the number of our advertising pages, as follows:

	1933	1934	1935	1936
Average number of advertising pages per month -----	29.8	34.0	35.8	36.9

Advertisers in THE JOURNAL are thoroughly reliable, and it is largely because of them that we are able to increase the number of reading pages sent to you each month. Therefore, the Committee urges the members of the Association to give advertisers in THE JOURNAL their undivided support. Cooperation of members in supporting JOURNAL advertisers and urging ethical firms to advertise in THE JOURNAL would enable us to increase further the size and value of the magazine. In reality, your cooperation in supporting JOURNAL advertisers is reflected in the number of advertising pages in THE JOURNAL, for assured support of advertisers means a steadily increasing number of advertisers.

4. *Library.* An increasing number of physicians are making use of the library in the headquarters office. While the selection is necessarily limited, some very valuable medical books are to be found on the shelves in the library. New books received are listed in THE JOURNAL each month. All members of the Association are privileged to borrow the books at no cost other than postage for transportation.

5. *Free Copies.* Again this year copies of THE JOURNAL were mailed for a three months' period to physicians eligible for membership in the Indiana State Medical Association.

#### IV. Medical Defense Activities

1. For the third successive year medical defense cases reported to the Indiana State Medical Association as filed against physicians have decreased since the last annual report. A year ago at the time of this report, September 1, 1935, the following nineteen cases were pending before the Committee, six of which have been closed during the course of the year, leaving thirteen cases still pending:

Case No. 129—Case pending. No new developments since 1925.

Case No. 156—Suit filed March 27, 1928. Case pending. Verdict for plaintiff after six days' trial in 1933; case appealed. Expense, \$66.28, paid September 23, 1929; \$350.00, paid June 30, 1933.

Case No. 162—Case still pending. Tried in 1928, and postponed. No further developments.

Case No. 170—Suit filed June 2, 1930. Still pending.

Case No. 172—Suit filed April 9, 1930. Case settled and dismissed. Expense, \$100.00, paid June 23, 1936.

Case No. 175—Case filed December 15, 1930. Three days' trial, resulting in a directed verdict for all defendants, June 3, 1933. Motion on July 24, 1933, for new trial overruled. One day trial, August, 1935, resulting in a decision and judgment for all the defendants. Expense, \$200.00, paid June 30, 1933; \$50.00, paid July 20, 1934; \$150.00, paid September 13, 1935.

Case No. 176—Suit filed March 28, 1931. Still pending.

Case No. 181—Suit filed September 8, 1931. Dismissal obtained December 15, 1935. Expense, \$203.25, paid March 5, 1936.

Case No. 187—Suit filed February 13, 1932. Three days' trial; jury disagreed; new trial ordered; case dismissed after trial and disagreement by jury, March 3, 1936. Expense, \$250.00, paid February 20, 1934, and \$50.00, paid March 25, 1936.

Case No. 194—Suit filed July 9, 1932. Pending.

Case No. 197—Suit filed December 30, 1932. Pending.

Case No. 200—Suit filed February 12, 1932. Pending.

Case No. 201—Suit filed originally on December 11, 1933, and refiled on June 11, 1934. Pending.

Case No. 202—Suit filed August, 1934. Pending.

Case No. 203—Suit filed August 22, 1934. Pending.

Case No. 204—Suit filed December 4, 1934. Trial October 24 and 25, 1935. Argument on motion for new trial December 19, 1935. Expense, \$300.00, paid on March 5, 1936.

Case No. 205—Suit filed 1934. Trial November 4 and 5, 1935. Directed verdict for defendant. Expense, \$500.00, paid November 6, 1935.

Case No. 208—Suit filed January 10, 1935. Dismissed by plaintiff September 13, 1935. Expense, \$158.50, paid September 13, 1935.

Case No. 209—Suit filed March 1, 1935. Pending.

Since September 1, 1935, and up to August 1, 1936, the following seven new cases have come before the Committee making a total of twenty cases pending at the present time as against nineteen unclosed cases at the same time last year:

Case No. 210—Suit filed September 18, 1935. Pending.

Case No. 211—Suit filed July 11, 1935, but headquarters office not notified until September 10, 1935. Pending.

Case No. 212—Suit filed November, 1935. Case assigned for trial September 16, 1936.

Case No. 213—Suit filed December 1, 1935. Pending.

Case No. 214—Suit filed April 1, 1936. Pending.

Case No. 215—Suit filed and defendant ordered to appear June 22, 1936. Pending.

Case No. 216—Suit filed March 16, 1936. Pending.

The total cost for medical defense from September 1, 1935, to August 1, 1936, was \$1,461.75. The cost for the preceding year was \$450.00 and for the two years preceding that it was \$550.00 and \$1,825.00 respectively.

2. *Medical Defense Fund Statement, from September 1, 1935, to August 1, 1936:*

Balance, September 1, 1935	\$2,230.21
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*Deposits:*

Dues, 104-1935 members	
@ 75c	\$ 78.00
Dues, 2,733-1936 members	
@ 75c	2,049.75
	<hr/>
	\$4,357.96

*Disbursements:*

Malpractice fees	\$1,461.75
Salary of Association attorney	550.00
Treasurer's bond	15.00
	<hr/>
Balance in checking account	
August 1, 1936	\$2,331.21

**V. Conclusion**

1. *Concrete Suggestion to House of Delegates.* The Executive Committee recommends to the House of Delegates that the question of bonding county medical society secretaries be taken up and thoroughly discussed by the House of Delegates at the South Bend meeting. (Minutes of the meeting of February 23, 1936.)

Respectfully submitted,

CLEON A. NAFE, M.D., *Chairman.*  
H. H. WHEELER, M.D.  
R. L. SENENICH, M.D.  
E. D. CLARK, M.D.  
O. O. ALEXANDER, M.D.

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**REPORT OF THE COMMITTEE ON LEGISLATION AND PUBLIC POLICY**

*House of Delegates, Indiana State Medical Association:*

Gentlemen:

A man high in American political life has been credited with the statement that a united medical profession could defeat or carry to victory any measure that might come before the American people. This is placing a tremendous value upon the ability, energy, and political genius of the 165,000 doctors in America and may be somewhat of an overstatement. However, we in Indiana can testify that because the medical profession of the state has kept itself informed on what went on in a legislative way, has kept alert and ever on the aggressive and has maintained its traditional position of battling in the interest of the public health, the doctors of the state to date have been successful in seeing that no legislation has ever been passed by the General Assembly that is inimical to the public and the profession.

This has been true in the past and if the medical profession is on the alert this should be true in the future despite the never ending legislative demands on the part of the cultists for special favors, special privileges and lower standards and a desire on the part of some groups to overthrow the present system of medical practice and establish in its place some form of socialized medicine.

Although there has been much discussion in regard to socialized medicine in the past few years and although attempts have been made in some states to establish some form of state controlled medicine, evidence of such a move has yet to be apparent in an Indiana legislative assembly and your committee is able to report that so far as it knows no such legislation has been passed or is in effect in any state.

Numerous other questions of interest to the doctor in practice affecting him as a citizen or as a physician, of course, will come up for consideration during the 1937 session of the legislature but these all are likely to be of minor importance as compared to any demands that might come from the chiropractors and drugless healers for separate boards and lowered standards of education for those who would treat the sick or a drive by the osteopaths for unconditional admission into hospitals.

The Legislative Committee of the State Medical Association never has resorted to any political legerdemain in its dealing with the legislature. It has in the past and will continue in the future to depend upon the interest and activity of the individual doctors in their own localities who should keep themselves informed on the matters under discussion and should make it their duty to see that high grade, qualified men represent their communities in the service of the state.

This is an election year. Now—before the votes are cast—is the time for your county legislative committees to interview your candidates for Congress and the Legislature. Irrespective of party, every physician should work and vote for those men who by past performance, background and reputation are known to be honest, reliable men who will not come to Indianapolis or go to Congress pledged against the profession. All that should be asked of your legislator is that he will give the representative of his local medical society an opportunity to explain the side of scientific medicine before obligating himself to vote on matters of health legislation or professional qualifications. *Now, before the election is the time to call on your legislator and explain all that.*

Since the last report of the committee a special session of the legislature has come and gone. It is not necessary here to repeat the details of those matters that came before that session as that report may be found in the April issue of THE JOURNAL of the Indiana State Medical Association. It is necessary, however, for every physician to keep informed, to keep alert and use his influence, which he as a doctor has, in seeing that high grade, responsible men are elected to represent him and his community at Washington and at Indianapolis next winter.

Respectfully submitted,

O. T. SCAMAHORN, M.D., *Chairman.*  
GEORGE DANIELS, M.D.  
GEORGE DILLINGER, M.D.

**REPORT OF THE BUREAU OF PUBLICITY**

*House of Delegates, Indiana State Medical Association:*

Gentlemen:

**I. Introduction.**

For the benefit of new readers of the annual report of the Bureau of Publicity, the Bureau thinks it is well to present again the historical background which explains the wide scope of its activities.

(1) *Bureau started in 1922.* In 1922, before the Association had a full-time, non-medical executive secretary, there became apparent to many a need for more active participation of organized medicine in the development of sound attitudes among the public in regard to matters of health and medical treatment. Accordingly, on the motion of Dr. John A. MacDonald, the House of Delegates authorized the President of the Association to appoint a committee of three to arrange for the selection of an "Educational Secretary" and appropriated \$5,000 to cover his salary and the expenses of his office. The President of the Association, Dr. William R. Davidson, of Evansville, appointed to this committee Drs. William N. Wishard, David Ross, and Frank Gregor. At this time, the secretary of the Association was Dr. Charles N. Combs, of Terre Haute, Indiana, who for a number of years had discharged the duties of this office with energy and faithfulness, albeit with virtually no compensation.

At the mid-winter meeting of the Council, in January, 1923, this committee through its chairman, Dr. W. N. Wishard, recommended that the commission of the House of Delegates be fulfilled by the establishment of a "Bureau of Information," which should employ and direct an "Educational Secretary." Dr. John N. Hurty, the first appointee to that office, suggested that the functions of the Bureau were more aptly designated by the title "Bureau of Publicity."

Actual opening of an office for carrying forward the work of the Bureau was delayed, first by other duties of Dr. Hurty, which he had to bring to a conclusion, and second by his illness. At the meeting of the House of Delegates in September, 1923, these circumstances were reported and further plans for the development of a central office were presented. Additional appropriation was allowed by the House to finance the more elaborate plans.

At the mid-winter meeting of the Council in December, 1923, the Bureau secured approval of its selection of Dr. James H. Stygall as Secretary. Dr. Stygall served until November 28, 1934, making a valuable contribution to the Bureau's early activities.

(2) *Development of central office.* The House of Delegates in September, 1924, authorized the combining of the office of Educational Secretary

(Bureau of Publicity) with that of Secretary of the Association, establishing the office of a full-time, lay "Executive Secretary." Accordingly, in December, 1924, Mr. T. A. Hendricks assumed the duties previously discharged by Dr. Stygall and Dr. Combs, undertaking the broadened secretarial function designated by the House of Delegates. With this change in organization, immediate supervision of the central office of the Association passed into the hands of an "Executive Committee," meeting once a month. The budget of the Bureau of Publicity was then adjusted to a few hundred dollars per annum to cover the expenses of its educational and publicity work, secretarial and stenographic requirements being met by the headquarters office.

It is noteworthy that the development of a central office with a full-time Executive Secretary came as an outgrowth of the movement to bring the medical profession of Indiana into closer relation with the public by way of education. The orientation of the central office has never been abandoned. Rather, through several standing committees other than the Bureau of Publicity, the central office makes the influence of the Association felt in various public relations in an educational sense.

(3) *Bureau's duties increased.* In the By-laws of the Association, the Bureau of Publicity is charged with duties as follows: "It shall be responsible for the dissemination of information concerning individual and community health to the lay public through articles prepared for publication in lay publications, or for addresses or talks delivered before lay audiences under the authority of the Association, and shall in every way seek to give the lay public a better knowledge and understanding of the aims and objects of scientific medicine."

From time to time the House of Delegates has referred to the Bureau special assignments, not obviously connected with education of the lay public, but nevertheless related in a broad way with social attitudes toward the profession. Thus, the historical interests of the Association were referred to the Bureau for development by the House of Delegates in 1929 and pursuant to this assignment an historian was recommended and appointed in 1932. The Bureau feels that by giving general publicity to noteworthy historical facts concerning Indiana medicine, the man-in-the-street can be influenced toward a better-informed appreciation of health problems.

It has been traditionally recognized by medical leaders that unwarranted and distasteful personal publicity by physicians, either singly or by groups, is a disturbing influence in the public mind, diverting attention from the scientific truths which the profession wishes to inculcate. Therefore, the Bureau has always sought, in an advisory capacity, to discourage such distasteful publicity, whether

sought for by physicians or foisted upon them by the press. The Bureau is happy to report that it has met with a fine spirit of co-operation from the vast majority of Indiana editors, and that infractions of the rule of good taste in newspaper stories about physicians are becoming rarer.

With the development of social and state agencies concerned with public health, maternal and child health, health aspects of social security legislation, etc., the Bureau has seen an opportunity to lend guidance, through advice, to the end that delicate relationship of the public to the profession be not disturbed by the arousing of unwarrantable expectations and various kinds of ballyhoo. Acting always in an advisory capacity, and never in an executive or administrative sense, the Bureau has been able on numberless occasions to point out how various educational objects may be achieved without violence to professional or public relationships.

Many questions, which in some state medical associations are handled by a committee of professional relations, in Indiana are referred, by custom, to the Bureau of Publicity. Since opinions of the Bureau have no judicial coloring, matters touching upon ethical standards can often be settled "out of court," so to speak, through the tendering of unofficial advice.

(4) *Weekly meetings of Bureau.* The Bureau continues its method of meeting once a week and feels that without such frequent meetings it could not keep up with the demands made upon it.

All of those newspaper men, physicians, and public officials who have lent their cooperation to the Bureau are entitled to know that letters of compliment continue to come in from the officers of other state medical associations—letters asking for information as to how the Bureau accomplishes the objects for which it was established. The Bureau's methods have been widely copied, even where the rather unique position of the Bureau in the state organization does not prevail.

Credit for this success must be distributed among all those who saw the need for a central organization based upon an educational relation with the public, and more particularly among those former members of the Bureau who have left the imprint of their own professional standards upon the policy of the Bureau. However, without the assistance of an executive secretary of unusual intelligence and diligence, the accomplishment of the Bureau could not have been one-half as great. In addition to present members, the members of the Bureau from the beginning are as follows: Frank W. Gregor, David Ross, S. E. Earp, William A. Doeppers, Murray N. Hadley, J. A. MacDonald, C. P. Emerson, J. H. Stygall, and E. D. Clark.

## II. Historical Work of the Bureau.

(1) Cooperating with the Woman's Auxiliary

to the Indiana State Medical Association in memorializing the following four Indiana medical pioneers:

- a. Mrs. Jane Todd Crawford, who is buried near Sullivan, Indiana. In 1809 Doctor Ephriam McDowell performed the first operation in the world for ovarian tumor upon her.
- b. John Lambert Richmond, M.D., who is buried in Spring Vale Cemetery, Lafayette, Indiana. Doctor Richmond, in April, 1827, did the first Caesarean section west of the Alleghany Mountains in what was then the United States of America.
- c. John Stough Bobbs, M.D., buried at Crown Hill, Indianapolis, who performed the first gall stone operation in the world.
- d. Mrs. Z. (Mary E.) Burnworth, Doctor J. S. Bobbs' patient, who is buried at Oakandon, Indiana.

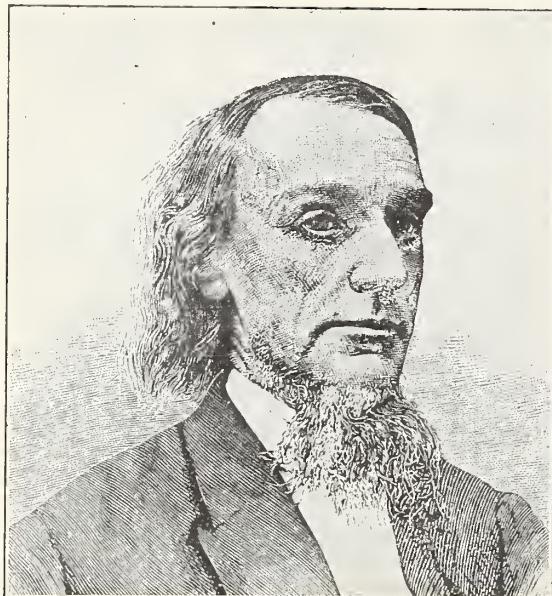
The Bureau wishes to congratulate Doctor A. L. Spinning, of Covington, secretary of the Fountain-Warren County Medical Society, and Doctor William M. Reser, of Lafayette, and express to them its appreciation for their services in locating the grave of Doctor Richmond. Doctor Richmond's body and that of his wife had been moved from Covington to Lafayette and it was only through diligent and untiring efforts on the part of these two physicians that the final resting place of this medical pioneer was located.

The Bureau also wishes to express its appreciation to Doctor W. N. Thompson, of Sullivan, who was appointed specially as a member of the Bureau to aid in the medical pioneer memorial work. The information which he supplied the Bureau concerning the accomplishments of Doctor McDowell and Mrs. Crawford's heroism has been of tremendous value.

As the report of this committee is being formulated, the Bureau, in conjunction with the Woman's Auxiliary, is completing plans for a pilgrimage to the graves of the above four medical pioneers.

(2) *Article on medical pioneers in the Indianapolis News.* The Bureau wishes to thank William Herschell, special feature writer of the Indianapolis News, for his splendid article upon these medical pioneers which appeared on July 11, 1936.

(3) *Articles in The Journal.* Under the direction of the Bureau, Doctor Leon G. Zerfas, historian for the Association, is writing a series of historical articles which have appeared throughout the past twenty months in each issue of THE JOURNAL. These articles have been compiled and prepared by Doctor Zerfas from a vast amount of historical information from many sources. The Bureau hopes that all those who are sufficiently interested in this very important matter of medical history will forward any material they may have to Doctor Zerfas or direct to the Bureau. Many local medical societies have appointed their own official historians and the Bureau urges all



*John Stough Bobbs, M.D., buried at Crown Hill Cemetery, Indianapolis. He performed the first gallstone operation in the world.*



*Mrs. Mary E. Burnworth, Dr. Bobbs' patient. She is buried at Oaklandon, Ind.*



*John Lambert Richmond, M.D., buried near Lafayette. Dr. Riehmond did the first Caesarean section west of the Alleghany Mountains.*



*Jane Todd Crawford, buried near Sullivan, Indiana. Dr. Ephraim McDowell's patient who underwent the first ovariotomy operation ever performed.*

county medical societies who have not done so to appoint a historian to prepare a medical history of each county.

(4) One of the noteworthy contributions of an historical nature received during the year were the notes taken by Robert Cravens while attending medical school in Philadelphia in 1817 and 1818. The Bureau felt that this material was of such vast historical value that it had one of its members prepare a detailed article concerning these notes. This article appeared in the March, 1936, issue of THE JOURNAL.

### III. The Bureau's Work as a Cooperating Agent.

During the year the Bureau cooperated with many of the other standing and special committees of the State Association and also on numerous occasions with committees and groups outside of the State Association.

#### (1) Cooperation with committees of the State Association:

- a. Preparation and publication of a pamphlet entitled, "Information Regarding the Prevention of Contagious Diseases." Ten thousand of these pamphlets were printed and most of these were distributed at the state fair by the Committee on State Fair to those who visited the State Medical Association building.
- b. Committee on High School Debates. The Bureau cooperated with the Committee on High School Debates, publishing several newspaper releases stating the fact that material prepared by the American Medical Association was available for distribution by the Indiana State Medical Association. This material voiced the attitude of the profession upon the question of socialization of medicine for the use of high school students in the preparation of high school debates. The action of the Bureau in giving publicity to the fact that material was on hand giving the medical side of the high school debate question was in accord with the resolution which was passed by the House of Delegates at the 1935 annual session of the Association at Gary.

#### (2) Cooperation with outside agencies:

- a. The Bureau gave an informative report concerning its work to the Delta (Colorado) County Medical Society at the request of the officers of that society. Several years ago the executive secretary of the Colorado State Medical Society came to Indianapolis and at first hand investigated the work carried on by the headquarters office and the Bureau of Publicity of the State Association.

A similar request for information was received from the St. Louis Medical Society and acknowledgment was received from the president of that organization thanking the Bureau

for its "special effort in giving us your method concerning publicity releases because it will be of great value to us here in our work locally."

A special request was received from the Michigan State Medical Society for an outline of the work of the Bureau, which was supplied, and a letter was received from the secretary of that society thanking the Bureau for the report and saying, "It certainly is a comprehensive survey and will be of great help to our public relations committee, which group I hope will decide to follow in your footsteps."

- b. Indiana Congress of Parents and Teachers. Under the direction of the Bureau of Publicity an article upon some health subject appears each month in the *Indiana Parent-Teacher*. This article is prepared by the head of the educational department of the State Division of Public Health.
- c. The Bureau refuses to cooperate with the publication known as *Medical Economics* in any way as that publication does not confine its advertising to approved products and companies and, according to the viewpoint of the Bureau, it therefore is not an ethical publication from cover to cover. In its letter to the editor of *Medical Economics* the Bureau said, "You, therefore, can understand the hesitancy of the Indiana State Medical Association to lend either directly or indirectly its support to your publication."
- d. Moving pictures. For the first time, a local theater manager called upon the Bureau to pass upon a moving picture which he was considering billing for his theater. He asked the Bureau to send representatives to the preview as he felt that perhaps the moving picture presented the medical profession in an untrue and unfavorable light. The Bureau complied with the manager's wish and although it felt that the particular picture was highly overdrawn, it did not feel that there was anything in it that was derogatory to the medical profession. This brings forward the suggestion from the Bureau that local county medical societies might be in a position to contact local theater managers and offer their services in passing upon any medical film with a medical or health background that might be shown in their community. On the whole the Bureau feels that medical films such as *Louis Pasteur*, *Men in White* and *Other Worlds* have been well done and merit a word of praise from the profession.
- e. Cooperation with Better Business Bureau. In accordance with the policy followed by the Bureau for the last decade, contact was maintained with the Better Business Bureau of Indianapolis and during the year an exchange

of information concerning various forms of medical quackery was very much worthwhile both from the standpoint of the Bureau of Publicity and, we hope, the Better Business Bureau.

- f. The Bureau of Publicity wishes to take this opportunity to thank Mr. Allan Hendricks, librarian of the Indiana University School of Medicine, for his help and cooperation upon various occasions throughout the year. The Bureau particularly wishes to thank Mr. Hendricks for his help in lending the Bureau the volume on vivisection by the late Doctor W. W. Keen.
- g. Indiana Hospital Association. In cooperation with the Indiana Hospital Association the Bureau prepared a special release upon National Hospital Day, May 12. As a result of this release, which was carried in a number of papers in Indiana, it is understood that the Indiana Hospital Association contemplates the formation of a publicity committee of its own. The Bureau sent a list of newspaper editors who receive the Bureau's releases to the representative of the Hospital Association who had been assigned the duty of getting together information preparatory to the formation of this committee.
- h. Indiana University School of Medicine. The Bureau approved a moving picture on plastic surgery which was part of the Indiana University School of Medicine exhibit at the 1935 state fair, but it felt that the pictures of victims suffering from cancer and burns were not suitable for display before a general audience. The Bureau felt that these pictures were of undoubted value and would be suitable for a professional audience but it felt they were too revolting to show to a popular audience.
- i. Material supplied upon request of various county societies that might be used in diphtheria immunization campaign. This material was supplied along with additional material from the director of the State Division of Public Health.

#### IV. Medical Ethics

(1) *Resolution on Medical Ethics.* A resolution was passed by the House of Delegates at the Gary meeting of the Indiana State Medical Association empowering the Bureau of Publicity to study the problem of medical ethics. The resolution follows:

"WHEREAS, the report of the Judicial Council of the American Medical Association, June, 1935, calls attention to the fact that gross violations of the Code of Ethics by individuals, groups and institutions are frequently ignored because no individual member of a society dared jeopardize his own standing by bringing charges, and

"Whereas, the American Medical Association desires to make further studies of the best methods to handle this problem,

"BE IT RESOLVED, that the Committee on Publicity of the Indiana State Medical Association study this problem in order that they may make suggestions to the American Medical Association which may be helpful in arriving at the best solution of our difficulties in handling violations of the Code of Ethics."

In accordance with this resolution the Bureau of Publicity has been in contact with the Judicial Council of the American Medical Association and reports that upon recommendation of the Judicial Council of the American Medical Association the House of Delegates of the national body took action which vested increased powers in the Judicial Council of the American Medical Association insofar as the violation of medical ethics is concerned. It is the understanding of the Bureau of Publicity, according to the recent action of the House of Delegates of the American Medical Association, that the Judicial Council may suspend a physician from the American Medical Association and from any affiliation with organized medicine who is guilty of violating the Principles of Medical Ethics of the American Medical Association. Complete statement of this action may be found in the minutes of the House of Delegates in the May 23 and May 30 issues of *The Journal of the American Medical Association*.

Previous to the meeting of the American Medical Association at Kansas City the following letter was received from the chairman of the Judicial Council of the American Medical Association in answer to an inquiry asking for information concerning contemplated rulings of the Council in regard to certain phases of medical ethics:

"Dr. West has sent me copy of your communication to him of November 20th and his reply to you. I am very glad indeed to find that you have a committee that is considering some of the subject matter which the Judicial Council covered in its last report. The Judicial Council has not prepared any detail which we can use in the changes that we suggested in the constitution and by-laws giving original jurisdiction to the state associations and to the American Medical Association.

"I am very much pleased to find that your Bureau of Publicity is giving consideration to this matter and it would be very helpful to the Judicial Council if we might receive from your Bureau particular suggestions of situations—first, that they know of and secondly which they think may be imminent, of conditions which would be such as would be intended to apply in the revision to be made. There might be no special hurry about this as the first item which the Judicial Council is taking up and which will occupy some of its time, is another portion of the report suggesting closer cooperation between the Council on Medical Education and Hospitals and the Judicial Council, which would be a part of the general situation which the House of Delegates evidently thinks warrants a revision. I would appreciate it very much, however, if I might have the data asked for at some time in January as early in the month as possible. The House of Delegates gave the Judicial Council a considerable amount of interim work on which they must report at the next annual meeting and I anticipate that we will finish up with the Council on Medical Education and Hospitals sufficiently so that we will be ready to take up the more general problems shortly after the first of the year. If your Bureau of Publicity will be kind enough to give this matter consideration and report to the Council, it would be very helpful and we would appreciate it very much."

(2) *Use of Physicians' Names in Newspapers.* The Bureau of Publicity receives clippings of items of a medical nature which appear in the papers throughout the state. It has come to the notice of the Bureau through these clippings that in certain localities the names of physicians often appear in connection with the treatment of their patients. The Bureau is emphatically opposed to such practice which is contrary to the Principles of Medical Ethics of the American Medical Association and is in direct violation of good taste.

The Bureau wishes to compliment the Wabash County Medical Society which passed a resolution to the effect that no doctors' names should be mentioned in the paper in connection with a patient. The Bureau hopes that every county society in the state will take action concerning newspaper notices of doubtful ethical character as the Bureau feels that such resolutions will be for the safety of the profession and the public.

The Bureau particularly commends the Randolph County Medical Society upon the inclusion of the Principles of Medical Ethics in its printed copy of the constitution and by-laws of the society and it hopes that all county societies, when they reprint their constitution and by-laws, will follow the action of the Randolph County Medical Society in this respect.

(3) *Stand of the Bureau against Relaxing Ethical Standards.* Several state societies, notably the Medical Society of the State of New York, have urged that the bars be let down so that the names of individual physicians may appear more readily in the press. The following resolution, passed by the Committee on Medical Trends of the New York Society, shows very clearly this tendency:

"WHEREAS, the Committee on Medical Trends finds that the point of view of organized medicine cannot be effectively presented through the lay press without direct quotation of individual physicians, it is hereby

"RESOLVED, That it is the sense of the Executive Committee that such rules or customs discouraging personal publicity as may seem to contravene the direct quotation of physicians be relaxed to the extent that requests of the Committee on Medical Trends for such statements from physicians be freely granted to the end that avenues of publicity may not be closed by such prohibitions as may have heretofore existed. It is particularly desirable for officers of state, district, or county medical societies, as well as chairmen of committees and subcommittees to be quoted, and in the event they are not available, members of such committees and subcommittees, on matters which pertain to the work of the Society."

The Bureau of Publicity time after time has taken the stand and once again desires to repeat its position that it is absolutely opposed to such a resolution and it feels that such a move would be definitely contrary to the basic principles of medical ethics. The Bureau, after reviewing the series of bulletins prepared by the Committee on Medical Trends of the Medical Society of the State of New York, feels that these bulletins "lead up to a frank espousal of newspaper publicity of individual technical opinions of physicians by the circuitous route of advocating defense against the on-

slaughter of socialized medicine. If the attitude suggested by the final bulletin were to be widely adopted, there would be an end to the professional reserve which has traditionally been enjoined upon individual doctors and which has protected all of us against the impulse to advance ourselves by publicity rather than by work. The whole trend of this series of bulletins is disingenuous and unflattering to the medical profession."

#### V. Fee Splitting.

The following letter and answer of the Bureau concerning fee splitting may prove of general interest:

"This note is not official. I mean by that, that the matter I wish to speak of has not been discussed in our medical society, neither have I been instructed to write to you or anyone about it, but some of us are of the opinion that the practice of fee-splitting, which seems to be a more common practice than any of us wish to admit, is doing more to undermine the moral fiber of the medical fraternity than newspaper publicity or many other evils which conflict with our principles of medical ethics. It seems hard to separate the idea of splitting fees from that of commercializing the practice of medicine, which I think all would agree to be wrong."

"We would be glad to know what the attitude of the Council of the Indiana State Medical Association is toward this practice. Does the Council regard it as a menace to be eliminated, or is it a thing to be tolerated with efforts at standardization, or is it something we can't do anything about?"

The Bureau answered as follows:

"The Bureau is heartily in accord with the statements contained in your informal note concerning fee-splitting. The Bureau has sought from time to time to get specific evidence concerning such cases and if and when it is supplied with such evidence it will be very pleased to take up the matter directly with the officials of your county society.

"The Bureau of Publicity abhors fee-splitting and officially every medical organization in Indiana is committed against it. Such practice is contrary to the Constitution and By-Laws of the State Association and the Principles of Medical Ethics of the American Medical Association which is or should be the official authorized code of conduct of every member of the Indiana profession. The Bureau wholeheartedly approves of the interest you have taken in this matter and will appreciate any definite information giving names, details, etc., that you may be able to send to it."

#### VI. Injection Treatment of Hernia.

The following communication was received by the Bureau from the American Medical Association in regard to the so-called injection treatment of hernia:

"My opinion is that the so-called injection treatment of hernia has not met with the general approval of the medical profession. I have been informed by a number of surgeons that they do not regard that particular method of treatment as worthy of acceptance."

"I suggest that you confer with competent surgeons and that you base a reply to Mrs. ——'s letter on the opinions expressed by such surgeons. I am quite confident that you will find that very few, if any, outstanding surgeons approve the injection treatments for hernia."

#### VII. Speaking Engagements.

During the past year the Bureau supplied speakers for the following meetings:

1935

August 22—Grant County Medical Society, Marion

September 10—Fayette-Franklin County Medical Society, Connersville.

September 10—Knox County Medical Society, Vincennes.

October 30, 31 and November 1—Vigo County Health Education Exhibit, Terre Haute.  
(Speakers supplied for both afternoon and evening meetings each day.)

December 7—Lawrence High School, Lawrence.  
December 10—Knox County Medical Society, Vincennes.

1936

February 3—Kiwanis Club, Frankfort.

February 19—Parke-Vermillion County Medical Society, Clinton.

February 24—Mooresville Woman's Club, Mooresville.

March 18—Parke-Vermillion County Medical Society, Clinton.

May 7—Fountain-Warren County Medical Society, Perrysville.

June 9—Fayette-Franklin County Medical Society, Magnesia Springs.

June 23—Rotary Club, Seymour.

*Doctors as Public Speakers.* Increasing demands have been made upon the profession in the last few years to fill speaking engagements before luncheon clubs, civic groups, parent-teacher organizations and other lay and semi-lay welfare and health bodies. For a number of years the Bureau has served as a clearing house and has from time to time been called upon by various lay groups to obtain a speaker upon a medical subject for their meetings. In accordance with the suggestion of the president of the Association the Committee on Graduate Education was called upon to supply speakers for various medical meetings throughout the state. Under the Social Security Act funds have been allotted to Indiana for educational work through "refresher" courses for the profession and medical talks for the laity to be directed by the new maternal and child welfare director of the State Division of Public Health. Requests have been made by this director for the names of physicians throughout the state who would be available to make these talks, and many physicians have volunteered their services. The Bureau of Publicity suggests that the rules adopted by the Bureau for speakers addressing lay audiences be followed by all physicians who make health talks before groups of citizens in this state. These rules follow:

1. The use of scientific terms should be avoided when speaking to a lay audience.

2. Do not talk over 30 minutes, unless urged to do so.

3. Please keep closely to your subject.

4. Put pep into your talk and speak loud enough for all to hear.

5. Speakers should arrive at least a few moments before the hour announced.

6. It is suggested that speakers avoid presenting "original" views and opinions which dissent from generally accepted medical teachings. Every doctor speaking to a lay audience represents the entire profession and should endeavor to interpret its composite beliefs fairly.

7. It is advisable to avoid citation of personal case reports.

8. Please aid the Bureau of Publicity in its efforts to make all presentations of its work as impersonal as possible.

**BROADCASTING RULE:** The Bureau has adopted a rule that no physician who is in private practice should have his name mentioned over the radio in connection with the Bureau of Publicity broadcasts, but the names of physicians holding public office and connected with public institutions may be mentioned over the radio, if they are not in private practice.

#### VIII. Newspaper Releases Published Since Last Report of Bureau.

Preparation of Children for School.

Annual Session of Indiana State Medical Association at Gary (7 releases).

Sinus Trouble.

High School Debates.

A Merry Day After Christmas.

Housing and Health.

A Hint to the Foundations.

Colds, Clothing and Climate.

Secretaries' Conference.

Lincoln History and Scientific Medicine.

Widening Health Service.

Health and Unemployment.

Low Wages and Disease.

Physicians' Graduate Education Program.

High Waters and Typhoid.

Spring Tonics and Spring Fever.

Spring Exercise.

May—The Health Publicity Month.

A Mother's Day Toast.

National Hospital Day—Tuesday, May 12.

That 'Ole Swimmin' Hole.

July Fourth "Fear."

Less Noise Campaign.

Poison Ivy.

These releases were distributed as follows:

1. One hundred fifty to the president of the White Cross Guild of the Indianapolis Methodist Hospital, for distribution to members of the guild.

2. Fifty to the director of the Division of Public Health Nursing of the Indiana State Division of Public Health.

3. Fifty to the state director of the Department of Health of the Woman's Christian Temperance Union of Indiana.

4. Each councilor and the secretary of each county medical society gets a copy of each article.

5. Editors of two hundred newspapers and magazines of the state receive copies. Besides these, the articles often are carried in the *Hoosier Health*

*Herald* of the Indiana Tuberculosis Association, and several other health publications of the state, including twelve religious, fraternal, and farm journals.

*Scope of Releases Enlarged.* Upon the suggestion of the president of the Indiana State Medical Association, the Bureau enlarged the scope of its releases during the past year. Heretofore generally the subject matter treated by the Bureau had to do with public health subjects, suggestions concerning the prevention of disease, the main theme being "In case of illness don't wait too long before you consult your family physician." The social aspect of disease is the main theme of this newer type of release. These releases are based upon the theory that there is a definite connection between the individual's place in society and his environment and the disease problem. These articles carry the theme that the socialization of medicine is not the answer in combating disease. Proper housing, proper environment, proper nutrition, stabilized employment and education are the answers, rather than a change in the traditional American method of rendering medical services. Among the releases printed by the Bureau which attacked the health problem from the economic and social angle are:

Housing and Health.

A Hint to the Foundations.

Health and Unemployment.

Low Wages and Disease.

During the year a number of letters were received from secretaries of county medical societies asking for instructions as to what the secretaries should do with the copies of the weekly releases which are sent to them as well as to some two hundred newspaper editors throughout the state. The Bureau of Publicity suggests that if each county medical society has not done so, it should appoint a committee to call upon the editors of the various papers in its county and urge the editors to carry in their newspapers the releases which are issued each week.

#### IX. Radio Talks.

The following radio talks have been given each week throughout the year on Saturday night over station WFBM of Indianapolis:

Preparation of Children for School.

Lye as a Poison.

How Can You Know.

So-Called Cancer Cures.

Competitive Athletics.

Sport for Health's Sake.

Hoosierland's Health Harvest.

Ventilation.

Cold Facts.

When Winter Comes.

A Safe Christmas.

A Merry Day After Christmas.

New Year's Resolutions.

- A Hint to the Foundations.
- Colds, Clothing and Climate.
- Lincoln History and Scientific Medicine.
- Widening Health Service.
- Health and Unemployment.
- Low Wages and Disease.
- Exercise.
- Spring Cleaning.
- Spring Exercise.
- High Waters and Typhoid.
- Spring Tonics and Spring Fever.
- Spring Exercise.
- May, the Health Publicity Month.
- A Mother's Day Toast.
- National Hospital Day—Tuesday, May 12.
- Vacations and Typhoid.
- Strenuous Week-Ends.
- Safe and Sane Swimming.
- That 'Ole Swimmin' Hole.
- Prevent Hay Fever Now.
- July Fourth "Fear."
- Less Noise Campaign.
- Poison Ivy.

#### X. Miscellaneous Activities of the Bureau.

##### (1) So-Called Advertising Health Campaigns by Certain Newspapers.

A newspaper approached the Bureau of Publicity for its approval of a health campaign which was to consist of a series of articles that would appear as paid advertisements in the newspaper, these advertisements to be paid for by the manufacturers and the various commercial firms of the state. The Bureau felt that although the material outlined to be used in such a campaign was of high quality, it did not feel that it should give official approval to this campaign because basically it would be commercial in nature.

##### (2) Bureau Represented at Annual Congress on Medical Education, Medical Licensure and Hospitals.

In accordance with the custom of the past several years the Bureau of Publicity sent a representative to the thirty-second annual Congress on Medical Education, Medical Licensure and Hospitals which was held in Chicago on February 17 and 18, 1936. The report of this representative appeared in the April issue of THE JOURNAL.

#### XI. Financial Statement of the Bureau.

The expenditures of the Bureau from August 1, 1935, to August 1, 1936, follow:

Clipping service	\$118.55
Postage	129.14
Stationery and mimeograph supplies	74.61
Printing	9.17
Historical work	4.72
Miscellaneous	18.31
Total expense	\$354.50

The Bureau was allowed by the Budget Committee \$437.00 for the year 1936. Of this amount the Committee has spent \$254.55 from January 1 to August 1, 1936, leaving a balance of \$182.45 unexpended in the budget for the remainder of 1936.

### XII. Conclusion.

In conclusion the Bureau of Publicity takes this opportunity to express its appreciation of the fine work done by Dr. Arthur J. Cramp, who retired several months ago after many years of service as head of the Bureau of Investigation of the American Medical Association. Since its establishment the Bureau of Publicity has received much valuable information from Dr. Cramp's office, particularly in regard to quackery in all its forms. The Indiana profession can well be proud of the work done for the physicians and the citizens of the United States by Dr. Cramp, a native Hoosier.

Respectfully submitted,

WILLIAM N. WISHARD, M.D., *Chairman*.  
E. VERNON HAHN, M.D.  
F. M. GASTINEAU, M.D.

### REPORT OF THE COMMITTEE ON CIVIC AND INDUSTRIAL RELATIONS

*House of Delegates, Indiana State Medical  
Association:*

Gentlemen:

This committee has had three cases referred in the past year. One involved medical expense in a compensation case and the other two medical expense. All three are significant, inasmuch as they represent the lack of business acumen in the medical profession.

A compensation case in sum and substance is that of an injured employe who alleged that he hurt his back in December, 1933. He was treated by a doctor on several occasions and after a short disability was discharged as able to return to work and did so until June, 1934, when he was laid off, due to causes other than injury. The doctor who is making the complaint then rendered him treatment for a period of eight months, under the assumption that the employer or the insurance company was responsible. The insurance company made an investigation of the accident and found that the man had suffered no disability and received no compensation. No application was made to the Industrial Board by the man for either temporary total disability or permanent impairment, nor did the doctor who presented the claim make any apparent effort during the period of eight months to find out who was to pay the bill other than he was told by some employe at the plant to send the bill to the insurance company. Under this set-up it is impossible for this committee to be of any assistance.

The two remaining cases represent a situation that occurs entirely too frequently. Following an automobile accident the aggrieved party alleges

that injuries are due to neglect, etc., of the other party and makes a demand of a financial settlement, the latter then notifies the insurance company who then sends out an adjuster to call upon the attending physician and obtain as much in detail as they can wangle out of the doctor all that has happened without any reimbursement for the time and trouble which the doctor has expended. Eventually suit is brought, the insurance carrier then employs local council (whom they pay) to defend the case. The local council or adjuster or both then interview the doctor who is competent and has the necessary equipment to make the proper examination, including laboratory and x-ray and notify him that he is to be at the court house on such and such a day. The doctor makes the examination and at the appointed time goes to the court house and sits around until he is called, when on the witness stand gives them the benefit of his testimony which is the result of the examination and a background of his years of experience. During all this time the doctor assumes in good faith that he will be properly compensated and the tragic awakening occurs when he presents his bill and is told that the amount is entirely out of reason and in fairness there are occasions when that is probably true.

When an insurance company contacts a lawyer for the purpose of defending a claim, the first conversation that is held is not the merit of the claim but what the charges will be. Such a practice could well be emulated by the doctor. Such an attitude is proper business practice and does not detract from his professional ability nor is it a violation of medical ethics. Fortunately the above experiences do not always obtain as there are a number of insurance carriers who discuss with the prospective examiner the cost. The two cases related above involve the same insurance company which is neither well known nor well financed. In corresponding with the company relative to these claims, they stated that they had taken up the question of the size of the bill with the Adjusters Association, but when inquiry was made by the committee as to facts relative to this instance, it was found that the matter had not been taken up with the Adjusters Association and, furthermore, they were not even members of the Adjusters Association. It is unfortunate that incidents like this react unfavorably against all insurance companies. The charges made in the above cases were well within proper bounds and in the final analysis the only recourse is for the doctors to take their claim to court, which so often results in the cost of collection being as much as the bill itself. A moral to be learned is for the doctor who is interviewed to definitely set out what terms he will accept and not have the child-like faith that the servant will be paid for his labor.

Respectfully submitted,

AUGUST F. KNOEFEL, M.D., *Chairman*,  
W. C. MOORE, M.D.,  
F. J. McMICHAEL, M.D.

**REPORT OF THE COMMITTEE FOR HOSPITALS  
AND MEDICAL EDUCATION**

*House of Delegates, Indiana State Medical Association:*

Gentlemen:

The report of this committee for the present year must of necessity be one of progress, since certain studies concerning health and group insurance in which we are interested probably will not be complete for some months.

On the subject of medical education there is very little that can be said. The question of the number of students a medical school should matriculate is a local problem, yet no school can long maintain its good standards which limits its enrollment to citizens of its own state. The selection from many candidates of the students to be accepted is in large degree a problem of the preclinical faculty, and the latter, since of a State university, is almost obliged to follow, as its major criterion, the records of college credits. The details of the medical course itself are problems for the medical faculty, but since these must comply first with the requirements of the University, of the State Board of Medical Registration and Examination (in large degree a national problem), of those of the Association of American Medical Colleges, and indirectly of those of the American Medical Association and the Association of American Surgeons, all national in their scope, the ability of this faculty to respond to local problems is indeed limited.

We can only report what was said last year concerning the danger of more small hospitals, and of the better equipment and staff organization of the larger city hospitals, which also should provide for the easier admission under satisfactory arrangements for patients from other counties. The small county hospitals of fewer than fifty beds (of which Indiana would seem to have too many, in view of the very slight use the public makes of them, as shown by bed occupancy) certainly have their place. They are very necessary for emergency surgery and for the care of the county indigent; but they can have little place in the great movement for health insurance which now presents to us our major problem. To fulfill the requirements which this latter movement is likely to develop will require hospitals of at least 150 beds continuously 75 per cent full and open to the patients from surrounding counties; for if insurance companies find the care afforded by a hospital unsatisfactory they are likely to insist on its reorganization according to lines which enthusiastic laymen lay down. The only way to avoid this is in advance to present for their use hospitals which professionally are above criticism.

Health insurance discussions now are assuming more practical and satisfactory form. The policies suggested cover hospitalization only, leaving the patient free to choose his own doctor, and the doctor at liberty to collect his bill directly from the patient. The latter certainly will be made much

easier than in the past if insurance has already paid the expense of hospital care. Of health insurance there is certain to be a great development in the near future, and it is of great importance that the medical profession use its influence to direct this strong current into proper channels. For the benefit of the public, regardless of its effect on the medical profession, of state medicine there must be none; of contract medicine, none; and of health insurance which guarantees medical care, none. Laymen understand little of this subject, and a campaign of education by the Indiana State Medical Association and of those who are likely to make critical decisions is now the great need.

Respectfully submitted,

CHARLES P. EMERSON, M.D., *Chairman.*  
T. W. OBERLIN, M.D.  
R. W. HARRIS, M.D.

**REPORT OF THE PUBLIC RELATIONS COMMITTEE**

*House of Delegates, Indiana State Medical Association:*

Gentlemen:

Throughout the year your Public Relations Committee has been ready to take up any task which might be assigned to it by the Executive Committee, the Council, or the House of Delegates of the Indiana State Medical Association.

By tradition, this committee was formed to function in a very specific capacity. We stand ready to serve the official groups of this organization whenever we are called upon to do so.

Respectfully submitted,

W. P. GARSHWILER, M.D., *Chairman,*  
J. H. WEINSTEIN, M.D.,  
W. E. JENKINSON, M.D.,  
H. L. MURDOCK, M.D.,  
T. C. ELEY, M.D.

**REPORT OF THE EDITOR OF THE JOURNAL**

*House of Delegates, Indiana State Medical Association:*

Gentlemen:

1936 has been good to THE JOURNAL. We have had what we regard as a most successful year, both in the scientific and business departments. We believe we have given you a better JOURNAL with increased reading pages and changes in the mechanical department that are decidedly for the better. Much of this is, of course, due to an increase in our advertising, the thing that makes a medical journal possible. Without the support of our advertising friends THE JOURNAL would be a sorry

looking sheet. Obviously, then, we must support our advertisers, a thing we have stressed from time to time.

We wish to acknowledge the generous support we have received from the membership and to thank the increasing group who write to tell us what they think about THE JOURNAL and to offer their kindly criticisms. Proffers of scientific papers are continually increasing, and at times we find ourselves hard pressed to use them all. An established rule to the effect that no member shall have printed more than a single paper in one year occasionally works a hardship but the editorial staff deems this a most important rule and does not believe it should be abrogated.

The year 1936, the most colorful politically in our memory, has offered many complexities; never before have there been so many occasions when our inclination was to sit us down and attempt to wield a most trenchant pen, pro or con, in connection with this or that "burning political issue," but, true to our opening paragraph, now several years old, we have endeavored to eschew all purely political discussions in this scientific magazine. The editorial pages of a few state medical journals closely resemble those of some of our swashbuckling sheets that are patently politically controlled. Often it becomes a task to refrain from entering this field but we have endeavored to adhere to the editorial policy set down for us.

For the staff of THE JOURNAL we have but the highest praise; efficient no end, willing to work not only at regular hours but give plenty of overtime, ever alert to pick up the bits of information that go to make up "news," our staff is unbeatable.

We are perhaps inordinately proud of THE JOURNAL; we believe it to be one of the really worth while medical magazines in the country; we know it can be improved, which means that it will be improved. We were a bunch of tyros when we took over THE JOURNAL, but we are slowly and surely acquiring knowledge of what a medical magazine should be and are putting such knowledge to work as rapidly as it is attained.

In conclusion, we again thank the three thousand doctors of Indiana for their support; JISMA is *your* JOURNAL—it belongs to the medical profession of the Hoosier state. With your help we will endeavor to keep it at the top of the heap.

Respectfully submitted,  
E. M. SHANKLIN, M.D., *Editor.*

#### REPORT OF THE COMMITTEE ON NECROLOGY

*House of Delegates, Indiana State Medical Association:*

Gentlemen:

The greatest friend that man has had  
Since Eden days of yore  
Has been the Doctor by his side  
Till all his needs are o'er.

The Doctor slaves for all mankind,  
The high, the low, the rich, the poor,  
And no deserving sufferer  
Is turned without his door.

He asks no wreath of glory  
Or emblem of renown,  
He only wants that his life's work  
Will be his starry crown.

—*Herbert Hobart Bokart*—"The Family Doctor."

And so the wheel of fortune made its tireless round of another year, and has checked off of our records 89 members as compared with 98 of last year—a decrease of nine.

The most accurate information that could be obtained by this committee shows that we added to our numbers during the fiscal year beginning August 1, 1935, and ended August 1, 1936, twenty-one new members. The greater number of these doctors were native sons and graduates of our own school of medicine, while a small group were foreign to our state and came to us by their preference. Thus we gained less than one-third the loss.

The youngest one of the group was Dr. Russell E. Phillips, of Warsaw, who died August 22, 1935, at the youthful age of 29 years.

The oldest one of the list was Dr. John Madison Fisher, of Lapel, who passed away February 22, 1936, in his ninetieth year.

One Negro physician was among those who departed: Dr. Joseph T. Johnson, of Indianapolis, who died May 24, 1936, aged 44.

As usual, heart disease took the greatest toll with 16 victims. Pneumonia came second with 10 lives; cancer, gall bladder and influenza each claimed 8; diabetes and apoplexy each took 7; Bright's disease, tuberculosis, general disintegration of the organism (senility) and accidents (3 by automobile, 2 by airplane) each accounted for 5; suicide 3; and intestinal obstruction took 2.

December of 1935 led the list in number of deaths with a total of 12; August of 1935 was second with 11; January and February of 1936 each claimed 10; May of 1936 had 9; March of 1936 took 8; April, 1936, accounted for 7; June and July each had 5; October and November of 1935 each added 4; and September of 1935 is last with 3.

One died in the 20's; 1 in the 30's; 7 in the 40's; 19 in the 50's; 29 in the 60's; 15 in the 70's; 15 in the 80's; and 1 was past 90.

Twenty-five graduated from Indiana Medical College and Indiana University School of Medicine; 8 graduated from Kentucky School of Medicine; 6 from Rush; 8 from University of Pennsylvania; 8 from Northwestern; 4 from Johns Hopkins; 3 from Jefferson Medical; 6 from Miami; 4 from Western Reserve; 4 from Homeopathic schools; 3 from physio-medical schools; 2 from eclectic colleges, and 3 from Bellevue. The school of choice of the remaining 12 could not be learned by the committee.

Here are some interesting facts concerning these doctors:

27 had been school teachers in early life;  
 14 came from the farm as farmers or farm hands;  
 9 had been grocery or mercantile clerks;  
 6 went from factories into medical school;  
 3 had been blacksmiths;  
 1 played cowboy for six years;  
 3 had prepared for the ministry;  
 4 had begun the study of dentistry;  
 4 dabbled at law;  
 22 went directly from high school into preparatory college and then into medicine.

Eight of these physicians left estates valued at \$30,000 or more; 10 left \$20,000 or more; 19 left \$15,000 or more; 7 were rated at \$10,000 or more; 17 had a rating of \$5,000 or more; 14 left estates of two to three thousand dollars in value; 14 had no rating with any financial company, and the remaining 10 had lived for some time on the charity of relatives, friends, or institutions.

A goodly number of these medical men had hobbies as all physicians should have. Nineteen lived on their farms and superintended the farm work. Six were poultry raisers; 4 specialized in fruits, and 6 in vegetables; 3 were dog fanciers and had kennels; 1 raised rabbits and sold many hundreds of them; 5 were horticulturists and spent much time with gladiolus, iris, peonies, dahlias, and roses; 1 was happy with his bird family and raised singing canaries and also bred talking parrots; 4 were musicians of considerable ability; 2 had drug stores in connection with their offices; 1 had a general store which was operated chiefly by his good wife; 2 were ordained ministers and preached regularly; 1 spent his golfing hours raising silver foxes, and 3 were devout fishermen.

Three of the number chose to remain unmarried, and all three lived to be near the seventy-year line.

One was the father of thirteen children and one was the father of three sets of twins. One was married five times. The one having 13 children left an estate of more than \$35,000; the three bachelors were not listed with any financial company. Forty-nine were connected by membership with some church. Sixty-four were Masons.

Please be advised that this committee does not claim that all of the information contained in this or any of these reports is absolutely correct. It may be readily realized that it is difficult to get accurate data in each instance by correspondence only. However, the committee does want you to know that the historical statements in these reports are reasonably correct and that we try very hard to get the most interesting and outstanding points in the life histories of the deceased members.

The committee wishes here to express its grateful thanks for all the good letters that have come to us from all parts of the state telling us of the interest and appreciation so many of you have in these annual contributions.

In closing, permit me to present "The Doctor's Creed."

"There is no time for idle scorning  
 While the days are going by,  
 Let your face be like the morning  
 While the days are going by.

"If a smile we can renew  
 While our journey we pursue,  
 O, the good we all may do  
 While the days are going by."

Respectfully submitted,  
 GEORGE G. RICHARDSON, M. D., *Chairman.*

#### REPORT OF THE COMMITTEE ON GRADUATE EDUCATION

*House of Delegates, Indiana State Medical Association:*

Gentlemen:

This year the annual postgraduate courses of the Indiana State Medical Association and the Indiana University School of Medicine were combined and held in Indianapolis. The State Association was responsible for the programs Wednesday and Thursday of the five-day course.

Your committee was highly pleased with the attendance at our meetings. There was an attendance of 653 of which 227 were students from the University. Favorable comments were received upon both the clinics and papers. This was the largest postgraduate meeting of any given by the State Association.

The mornings were devoted to clinics at the University. The afternoon and evening meetings were held in the Riley Room of the Claypool Hotel. These meetings were devoted to the study of cardiovascular and neoplastic diseases.

On Wednesday Doctor Gatewood, associate clinical professor of surgery, Rush Medical School, Chicago, and Doctor Charles Christian Wolferth, professor of medicine, University of Pennsylvania, gave talks. On Thursday talks were given by Doctor Louis Katz of Chicago and Doctor Dean Lewis, professor of surgery, Johns Hopkins University School of Medicine, Baltimore.

The committee was allowed \$600.00 by the Budget Committee for the year 1936. Of this amount \$381.77 was spent, leaving a balance of \$218.23 unexpended in the treasury.

The following recommendations are made for next year's graduate study:

1. That the committee to have this work under its care be appointed as early as possible so that it may proceed with its plans for the coming year. Considerable difficulty was experienced this year in getting men of national prominence because the date of the meeting was not set until late.

2. There should be a reasonable amount of money to use in entertaining out-of-state guest speakers during their stay in Indianapolis.

This year a new project was assumed by your committee at the recommendation of our president, Doctor R. L. Sensenich. We endeavored to place speakers on the programs in as many county societies as desired their appearance. Our idea, as outlined by Doctor Sensenich, was the stressing of cardiovascular and neoplastic diseases. Insofar as possible, the speaker was selected by the county society. As many different men in these two fields as we could get were given the remaining few places where speakers were in demand by the county society. Speakers from nearby counties were used whenever possible in order that no individual would be taken too far from his home. This program, we feel, was very successful considering it was the first year of its inauguration. We feel that it would be well to continue some such program for next year.

Your committee appreciates the cooperation given it by all the various members of the Indiana State Medical Association.

Respectfully submitted,

C. J. CLARK, M.D., *Chairman*.  
 B. G. KEENEY, M.D.  
 ROBERT MOORE, M.D.  
 HERMAN BAKER, M.D.  
 W. W. HOLMES, M.D.  
 J. T. OLIPHANT, M.D.  
 PAUL A. GARBER, M.D.  
 R. H. BEESON, M.D.  
 W. C. WRIGHT, M.D.  
 W. D. GATCH, M.D., *ex-officio*.

#### **REPORT OF THE COMMITTEE ON DIPHTHERIA PREVENTION**

*House of Delegates, Indiana State Medical Association:*

Gentlemen:

The Diphtheria Prevention Committee reports that diphtheria deaths for the current year are somewhat higher than they have been for the last two or three years.

The diphtheria immunization campaign appears at first glance not to have been effective, but upon further analysis we find that there have been very few deaths in those age groups which were most nearly covered by the immunization process, namely, grade school children. An unusually high percentage of deaths during the past twelve months has been of adults. There has also been a large number of deaths of children under two or three years of age.

It seems clear that diphtheria immunization will be effective in wiping out diphtheria only in case all children are immunized at an early age. It was formerly supposed that if one-third or one-half of the children were immunized, it would make

it impossible for the disease to assume epidemic proportions. Now we know definitely that such is not the case. Considerable evidence is accumulating which indicates that persons who themselves are immune as a result of immunization are likely to be carriers of virulent germs and for that reason actually increase the danger to unimmunized persons. There seem definitely to be more carriers than was formerly the case.

The committee has made no active effort to promote immunization, but has confined its activities to keeping the profession informed concerning the number and distribution of deaths and to urging that the public take advantage of immunization.

Respectfully submitted,

THURMAN B. RICE, M.D., *Chairman*,  
 A. C. YODER, M.D.,  
 V. EARLE WISEMAN, M.D.,  
 JOHN H. GREEN, M.D.,  
 B. M. TAYLOR, M.D.

#### **REPORT OF COMMITTEE ON THE STUDY OF HEALTH INSURANCE**

*House of Delegates, Indiana State Medical Association:*

Gentlemen:

No special meeting of this committee has been called since no reason for special action has occurred since the last report. However, it is well for us to read the sign posts that are around us and consider with all seriousness the trends we are facing. On March 1 the first compulsory Health Insurance scheme to be attempted in America was enacted by the British Columbia Legislature. The act, which goes into effect January 1, 1937, is compulsory for all wage earners excepting farm laborers, with incomes under \$1,800 a year. This provides a 2% wage deduction and 1% employers' contribution. The matter of service, benefits, periods of disability payments and administration are matters of indefinite limits. Jewish physicians have been entirely removed from all government service in Germany and have been proscribed from taking part in any private clinic. Also it is prohibited that any Aryan physician call in consultation any Jewish physician. Austria reports a deficit of over \$200,000 in its health insurance budget for the past year. This is based on an average service charge of from 25 to 32 cents. Since the majority of obstetric cases in England are attended by midwives of questionable training, the government is offering them their choice of two things. They must either take sufficient training to qualify themselves to do proper work, or they may be permanently retired and receive a settlement from the government equal to three times their net average yearly income for the past three years. The Italian profession is entirely under

government supervision and a new schedule of fees has been announced in which the maximum charge for house visits will be equivalent to \$1.00 for the first visit and examination and 75 cents for after calls. For office calls the charge will be 75 cents for first call and examination and 50 cents for subsequent calls. With Mexico undergoing communistic changes and rigorous domination by labor unions, their Utopian ideals will soon find friendly reception among our own discontented and unemployed.

Beyond all doubt we ourselves are more to blame for these changing conditions than otherwise. Our professional curiosity and desire to utilize our guinea pig medical training has brought the average layman to face unusual and unjustified expenses in diagnosis and treatment. Mechanized medicine and factory assembly line training requires the younger physicians to follow this in their practice. The overhead in education, lost time and office equipment makes it necessary to utilize all of his equipment on every patient to keep going. This in hospitals is overworked from the laboratory standpoint, and the ultimate outcome will be the people demanding all they have been told they need, and sooner or later the cost of medical care will become an impersonal matter. At present we face a malpractice liability when we fail to insist on these unnecessary procedures, even though our best judgment tells us they are an unjustifiable expense to our patients. With three of the four legs of the Perkins, Wagner, Epstein stool set up for so-called Social Security, it is only a question of time until the fourth leg, State Medicine, will be demanded to square accounts of political expediency.

Respectfully submitted,

M. A. AUSTIN, M.D., *Chairman*.  
W. U. KENNEDY, M.D.  
O. R. SPIGLER, M.D.  
BEN MOORE, M.D.  
A. E. STINSON, M.D.  
WALTER KELLY, M.D.  
J. M. FLEMING, M.D.

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#### ADDENDUM

It appears that some form of state practice is inevitable. The boundary line between forced unemployment insurance and an indemnity for unemployment due to sickness or disability is easily crossed. Both political parties have affirmed their belief in so-called Social Security, though one is apparently less eager and promises changes in plan. The glittering promises under all the plans, the unreal and largely impossible, make a definite appeal to the proposed beneficiaries which cannot be erased by logic, experience or education. The profession must protect itself by intensifying its tremendous influence with the people so that it may at least be supported in asserting its superior capacity to direct policies and modify security proposals to the least objectionable form.

It must not be content solely to oppose but must offer methods which meet the unwise demands without doing irreparable harm either to the public or to the profession. It must be so solidly organized that our leaders may have unwavering support. It must view with outspoken disfavor, individually conceived and adopted methods, not examined, considered and approved by adequate authority.

It must maintain its hold on the affections of the people by continuing its age-old policies of charity and unselfishness, for therein lies its own security. Attempts to secure trivial pay for known indigents while apparently just and economically sound, are short sighted since they eventually place the profession on a purely commercial basis to the final loss of its influence, now so largely grounded on the ethical base of humanitarianism.

We need to join and wholeheartedly support and at least indirectly lead, in every movement which has real value to the health of the people, that we may retain the widespread and deeply rooted faith in our unselfish devotion to the welfare of all the people.

Every physician is important to his own clients. He ought constantly to discuss with his patients the desirability of maintaining the present status of medical service and constantly impress the splendid record of unfailing and constant progress and so more deeply inculcate the belief that as a profession we may continue to be trusted to do whatever is best.

WALTER U. KENNEDY, M.D.

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#### REPORT OF THE COMMITTEE ON VETERANS' AFFAIRS

*House of Delegates, Indiana State Medical Association:*

Gentlemen:

No new legislation has been passed nor seriously proposed by Congress affecting hospitalization of veterans during the last session; consequently, your committee has had nothing come before it.

If the committee is to be continued, it would be wholly to be on the lookout for such legislation as might adversely affect the medical profession.

Respectfully submitted,

C. C. BASSETT, M.D., *Chairman*,  
I. M. CASEBEER, M.D.,  
R. A. CRAIG, M.D.,  
J. L. ALLEN, M.D.,  
M. F. DAUBENHEYER, M.D.

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#### REPORT OF COMMITTEE ON STUDY OF HIGH SCHOOL ATHLETICS

*House of Delegates, Indiana State Medical Association:*

Gentlemen:

This committee feels it is necessary to continue to urge that all boys participating in competitive

athletics be thoroughly examined both at the beginning of the boy's playing career, and at times during it. We need not worry much about harm resulting to the physically sound and well-conditioned athlete. We are obliged, however, to have the proper interest and devote the necessary time to these examinations. No one except a member of the medical profession can advise intelligently about the state of a given player's health. In this connection, we have learned that in a few communities the school authorities have placed this responsibility in the hands of unqualified irregulars. We know that the Indiana High School Athletic Association does not favor this arrangement, and we believe that the local county medical society should pay some attention to this issue when it arises. Also, the responsibility for keeping a boy out of a contest or denying him the privilege of entering competition should be fixed in one capable individual.

A new schedule for the final basket ball tournament has been tried, and we understand that it will be tried again in the same manner in 1937. According to this schedule, no more than two games are played in any one day. This tournament, consisting of games on four successive weekends, was well conducted with good medical supervision throughout. However, the controversy about three games in one day is still a live subject even though the Indiana State High School Athletic Association has chosen to eliminate this feature at least temporarily. It would seem that the question of three games in one day is just as controversial and just as near agreement as are the views on liquor, politics, and religion.

Respectfully submitted,

W. D. LITTLE, M.D., *Chairman*,  
H. C. WADSWORTH, M.D.,  
G. A. THOMAS, M.D.,  
J. E. P. HOLLAND, M.D.,  
WILLIAM L. GREEN, M.D.

itism on the part of the township official had given unduly large sums of money, apparently in such manner as to be of little benefit to the sick. Since there is a direct relation between cost and quality and quantity of medical care, too little compensation soon shows its effects. One of these effects was the increased amount of gratuitous work that was done by the rest of the profession. Having observed these effects, it was hoped to approach a solution through the State Association of Township Trustees, since the direct personal appeal had failed to achieve any correction of the abuses.

The Trustees State Association was contacted and one joint meeting was had. After considerable discussion, the absence of common ground for mutual interest became apparent. The trustee was interested in low cost and, in some instances, any doctor who would bid the low dollar was good enough. The medical profession was interested in good service to the poor and insisted the pay should be sufficient to permit its adequacy. In an effort to establish a preliminary basis for negotiation, it was agreed that questionnaires be sent to county medical societies and to township trustees.

We have had returns from one-third of our county secretaries. A digest of these answers was published in the April number of THE JOURNAL.

Further effort to continue these contacts was met with an informal suggestion that the whole matter be postponed. The committee is of the opinion that its activities should be discontinued unless there is some evidence that the State Association of Township Trustees would show greater interest in the solution of the problems presented.

Respectfully submitted,

F. S. CROCKETT, M.D., *Chairman*,  
M. R. LOHMAN, M.D.,  
E. L. SCHABLE, M.D.

#### COMMITTEE ON LYME BURNS IN CHILDREN

(No report received.)

#### REPORT OF THE TOWNSHIP TRUSTEES LIAISON COMMITTEE

*House of Delegates, Indiana State Medical Association:*

Gentlemen:

During the past three depression years the problem of medical care dispensed through the office of the township trustee has been solved, on the whole, to the satisfaction of most of those whose interests were involved.

In certain townships there seemed to be an undue disposition on the part of the trustee to give precedence to cost over quality of medical care. This resulted in some instances in compensating very inadequately the doctors for their attention to the destitute, while in others it is alleged that favor-

#### REPORT OF THE COMMITTEE FOR THE STUDY OF PUERPERAL MORTALITY

*House of Delegates, Indiana State Medical Association:*

Gentlemen:

Your Committee is pleased to submit the following report:

The number of living births in Indiana for 1935 was 52,799. Total stillbirths, 1,430. Maternal deaths per 1,000 living births, 4.9.

A more detailed report will be the subject for an article to appear in THE JOURNAL at a later

date. Suffice it to say at this time that the maternal death rate per 1,000 births is the lowest for Indiana during the entire time of the existence of the Bureau of Vital Statistics.

The number of stillbirths is entirely too high and doubtless could be reduced by improved prenatal service.

With the limited information available on the cause of these deaths, corrective advice is impossible; hence the first step necessary is an analytical survey. A form for securing information which will be helpful in this direction is in process of construction at the present time and your Committee has the approval and cooperation of the office of the Secretary of the State Board of Health in this endeavor; hence, we hope to create a foundation from which helpful suggestions toward improvement may follow.

To stimulate interest among the doctors of the state in puerperal matters through editorials in THE JOURNAL is one of the objectives of your committee. We regret to plead dilatory to date in this practical and valuable method of promoting our objective.

We are happy to report that members of your committee contributed to the post-graduate course given by the Indiana State Medical Association jointly with the Indiana University School of Medicine. Practical instruction in diagnosis, prenatal care, and operative procedures, and lectures on the cardio-gravida, toxemias of pregnancy, emergencies, and aphorisms, were provided.

Excellent educational opportunities by means of post-graduate courses are being offered by the Indiana Division of Maternal and Child Health to the physicians of our state in their own communities, and on a scale which would hardly be possible by our efforts. This method of reducing puerperal mortality always has been advocated by this committee; we have given our whole-hearted support to the above-named organization and will cooperate in every possible manner to promote such courses over the state and urge the county medical societies to avail themselves of this opportunity.

An effort to contact the public through the county medical society was made by sending a complete outline for such purpose to each of the county medical society secretaries. This outline consisted of:

1. Suggestions for organization of working committee on maternal welfare.
2. Skeleton remarks for speakers.
3. Material for editorial comment.
4. Radio talk.
5. Sermon helps.
6. Pertinent paragraphs from experts in field of maternity care.

A follow-up questionnaire concerning such activities has been sent out by your committee. Suffi-

cient information has not yet been secured to report upon the results of this effort; however, we are convinced that benefit will be derived therefrom.

Your committee has accumulated numerous talks for both medical and lay groups, and these will be available to those desiring same through the headquarters office of the Indiana State Medical Association, 1021 Hume Mansur Building, Indianapolis, Indiana. We urge the medical profession to impress upon the public the great benefits to be derived from careful prenatal supervision, by which means complications of labor are avoided and puerperal mortality reduced.

To date we have not been able to comply with the suggestion of the House of Delegates of the Indiana State Medical Association on a pamphlet of "Do's and Don'ts of Obstetrics," not having been able to find something practical; however, we are attempting to have such a booklet created and are working on the subject.

We urge upon the members of our society who are directors on hospital boards to set aside a section of their hospital as a maternity ward in order to segregate these cases from the general hospital patronage, since it is common knowledge that fewer complications arise under such arrangement.

We deplore the effort of some physicians to give obstetric care in office quarters, where all kinds of minor surgery and surgical dressings are performed, when well-regulated hospital service is available. This practice is not based on sound medical principles and can be done only for the convenience or financial advantage of the doctor, and the fallacy hereof must soon be reflected in puerperal mortality and morbidity.

We recommend early hospitalization of complicated cases, since emergencies can certainly be more successfully met under these surroundings.

We recommend that a dissertation on maternity, in small pamphlet form, be dispensed with every marriage license issued in the state of Indiana, these to be provided by the Indiana State Medical Association and distributed by the county clerk when the marriage license is issued. This practice has been followed in Marion county and the many grateful expressions by the recipients attest to the popularity of this method of disseminating information. Benefit for our cause, though remote, will certainly follow.

We recommend that each county medical society have a committee on maternity welfare, whose general duty it shall be to hold down puerperal mortality in their community and to promote "safe motherhood" by acting as a liaison committee between the profession and the citizenry of their county.

We gratefully acknowledge the courteous assistance given us by Mr. T. A. Hendricks, secretary

of the Indiana State Medical Association, and the headquarters staff, and the enthusiastic cooperation of the Indiana State Board of Health.

Respectfully submitted,

H. F. BECKMAN, M.D., *Chairman.*  
KARL BEIERLEIN, M.D.  
L. H. ALLEN, M.D.  
R. W. SHANKS, M.D.  
ROSS COOPER, M.D.  
L. H. CROWDER, M.D.  
C. R. PETTIBONE, M.D.

#### REPORT OF THE COMMITTEE ON STATE FAIR

*House of Delegates, Indiana State Medical Association:*

Gentlemen:

The report of the Committee on State Fair cannot be completed until after the State Fair is held, September 5-11, inclusive.

This year the exhibit of the Indiana State Medical Association and the American Medical Association at the Indiana State Fair will be held in one of the two State Board of Health buildings, just north of the Automobile building.

The Scientific Exhibit division of the American Medical Association will supply the following material:

1. Information about disinfectants.
2. Dangers of self-diagnosis.
3. Information about health.

If possible, they also will send duplicates of the series of nine groups dealing with medical discoveries of the last century which were shown at the Century of Progress Exposition.

Free examinations will be made, using the electrical impedance testing machine which is being developed at the Indiana University School of Medicine. A check-up on a large group of individuals is being made to determine how the findings compare with the ordinary basal metabolism test now being used.

One member of the committee will be present at the exhibit each day to answer questions and explain the various exhibits.

Other exhibits in the same building will be shown by the Indiana State Dental Association, the Indiana State Nurses' Association, the Indiana Tuberculosis Association, and the Indiana Pharmaceutical Association. As yet no reply has been received from the Hospital Association concerning an exhibit.

Respectfully submitted,

RUSSELL A. SAGE, M.D., *Chairman.*  
J. E. FERRELL, M.D.  
MORRIS B. PAYNTER, M.D.  
OREN E. CARTER, M.D.  
GERALD GUSTAFSON, M.D.  
ROBERT WISEHEART, M.D.  
E. C. McDONALD, M.D.

#### REPORT OF THE COMMITTEE ON MENTAL HEALTH

*House of Delegates, Indiana State Medical Association:*

Gentlemen:

The Committee on Mental Health of the Indiana State Medical Association wishes to report that no specific problems have been presented for consideration and recommendation during the past year.

We wish to report that no changes of importance have been made in the administration or medical service of our state or municipal institutions for the care of the mentally ill. All are overcrowded and there is a constant demand for more beds.

The Welfare Act passed by the special session of the legislature contains a great many things which are or will be of considerable interest to the medical profession. A new system of supervision of our institutions is provided. This should be watched carefully to see that it does not become meddlesome or dictatorial.

With the exception of the City of Indianapolis, there is no county or city in the state which is adequately equipped to care for mental cases. We see no reason why general hospitals, either those privately owned or operated under the county hospital law, should not be equipped properly to care for emergency mental cases, and those awaiting commitment to the State Hospital. We recommend that this matter be referred to your Hospital Committee for consideration.

In previous reports we have discussed the matter of the care of a large group of patients requiring institutional management who are not indigent, but who are unable to meet the necessary expenses of the private sanatorium. This problem is still before us and we see no immediate solution.

The training of medical students and nurses in the field of psychiatry is, in our opinion, satisfactory. There is an increasing number of young physicians who are interesting themselves in this line of work.

While we are opposed to the idea of state medicine and feel that psychiatric problems are medical problems, yet we are aware of a growing demand from the public for psychiatric, child guidance and other forms of mental hygiene clinics. Lay organizations are becoming interested, and the time is near at hand when the medical profession must assume this responsibility.

This Committee is always at your service and anxious to investigate and consider any problems referred to it.

Respectfully submitted,

L. D. CARTER, M.D., *Chairman.*  
JOHN H. HARE, M.D.  
E. ROGERS SMITH, M.D.  
L. E. PENNINGTON, M.D.  
L. P. HARSHMAN, M.D.  
C. L. WILLIAMS, M.D.

**REPORT OF THE COMMITTEE ON EXPERT  
TESTIMONY**

*House of Delegates, Indiana State Medical  
Association:*

Gentlemen:

Your Committee on Expert Testimony has worked most diligently during the past year, having received copies for consideration and study from fifteen various states and several foreign countries as to their methods of procedure relative to the subject in question. Also considerable correspondence with the Bureau of Legal Medicine and Legislation of the American Medical Association was exchanged in order to obtain a clearer understanding as to the attitude of the national organization in regard to this subject.

The report of the Bureau of Legal Medicine and Legislation of the A. M. A. prepared by its director, Dr. William C. Woodard, has the following to say in a request for an opinion relative to the better regulation of expert testimony. This opinion has been endorsed by the House of Delegates of the A. M. A.:

"The matter of expert testimony continues to arouse interest, but the interest aroused ends in discussion. The difficulty in the adoption of corrective measures arises not only out of constitutional provisions but out of the fact that there seems to be no adequate evidence of the need for legislation. The lawyer does not have to introduce an incompetent or dishonest expert witness into any case or to deceive any judge with respect to the qualifications of the witness whom he proffers. The judge is not required to permit any person to testify as an expert witness until he, of his own knowledge, or through evidence offered by counsel, is satisfied that the proffered witness is an expert. When lawyers cease to proffer ignorant and dishonest witnesses as experts, and when judges cease to recognize as expert witnesses persons with whose qualifications as experts they are not fully satisfied, there will be no market for services of such witnesses. Until that time comes and it has been determined how much of our difficulties arise out of failures on the part of lawyers and judges to exercise the rights and to discharge the duties they now have and how much is due to the inadequacy of laws governing the situation, it will be difficult to draft corrective legislation."

In the opinion of your committee, it appears that the attitude of the American lawyer and the medical man seems to be one of suspicion and misunderstanding. These make cooperation between them difficult, if not impossible. The lawyer is skeptical of the physician's knowledge and the physician is distrustful of the lawyer's purposes. The lawyer is repelled by what he conceives to be pretentiousness of the physicians, and the physician is impatient with what he regards as lack of understanding of lawyers. The lawyer believes

that the physician does not understand the lawyer's problems. The physician is of the opinion that the lawyer has no genuine desire to utilize him and his knowledge of dealing with medico-legal problems.

The major criticisms which physicians have to make in regard to criminal law and its administration can be summed up in a single general criticism that law and legal procedure are based upon an antiquated and outmoded conception of the etiology of human behavior and the nature of the human mind and personality. Specifically, their criticisms have been directed against the concept and criteria of criminal responsibility and the way in which criminals are dealt with in legal processes. Proposal for alteration in the criminal law should be made in a more experimental and truly scientific spirit.

Lawyers and physicians should work together most effectively and with the least opposition of public opinion and the least risk to society. Physicians have contributed much, and can contribute more, to the improvement of certain aspects of the administration of the criminal law. The field in which they can work most effectively and with the least resistance from the public is from the viewpoint of the scientific understanding as to the motivation of human conduct.

Relative to the matter of criminal law, your committee recommends and advocates the following for a better understanding of psychiatric problems:

1. That there be available to every criminal and juvenile court a psychiatric service to assist the court in the disposition of offenders.
2. That no criminal be sentenced for any felony in any case in which the judge has any discretion as to the sentence until there be filed as a part of the record a psychiatric report.
3. That there be a psychiatric service available to each penal and correctional institution.
4. That there be a psychiatric report on every prisoner convicted of a felony before he is released.
5. That there be established in each state a complete system of administrative transfer and parole and that there be no decision for or against any parole or any transfer from one institution to another without a psychiatric report.

These conclusions should be given the following considerations:

1. That the disposition of all misdemeanants and felons be based upon the study of the individual offender by properly qualified and impartial experts cooperating with the courts.
2. That such experts be appointed by the courts with provision for remuneration from public funds.
3. That prisoners be discharged or released upon parole only after complete and competent psychiatric examination with findings favorable for successful rehabilitation.

4. That the incurably inadequate, incompetent and anti-social offenders be interned permanently, without regard to the particular offense committed.

Such a program would make for a better understanding between medicine and the law in the interests of an improved criminal code, a socially intelligent management of the criminal, and a better control of crime and delinquency.

#### RESOLUTIONS

*"Resolved,* By the House of Delegates of the Indiana State Medical Association that it recognizes the urgent need for remedial legislation and such change in court procedure as will correct the abuse of expert opinion evidence; approves the efforts of this Association and the Indiana Bar Association and further be it

*"Resolved,* That the House of Delegates endorse the principle that in civic and criminal cases the court may appoint expert medical witnesses, who shall be paid out of public funds, and who may furnish a written report; and that the Indiana Medical Association offers its cooperation by such means as lie in its power to promote such legislation as will be mutually satisfactory to the medical and legal professions toward the correction of the present unsatisfactory procedure of presenting expert opinion evidence, and the Indiana State Medical Association is hereby requested to use the facilities of this organization in such a way as to give effect to the sentiments expressed in this resolution.

"And, further, that the House of Delegates endorse certain principles approved by the American Medical Association relative to this subject and such subsequent action to be approved by them and the American Bar Association.

"That in civil and criminal cases where the issue of insanity is raised, expert medical witnesses may be appointed by the court, and paid from public funds, and that such witnesses may present written report.

"Be it further

*"Resolved,* That a copy of this resolution be sent to the Indiana State Bar Association.

"It is further also resolved that this committee be discontinued until such time when more definite action relative to the matter of Expert Testimony is endorsed by the American Medical and the American Bar Associations."

Respectfully submitted,

MAX A. BAHR, M.D., *Chairman*,  
JOSEPH A. PUGH, M.D.,  
W. W. WASHBURN, M.D.,  
R. N. BILLS, M.D.,  
JON KELLY, M.D.,  
ALBERT STUMP, Ex-Officio.

#### REPORT OF THE COMMITTEE ON THE PREVENTION OF TRAFFIC ACCIDENTS

*House of Delegates, Indiana State Medical Association:*

Gentlemen:

In view of the fact that almost every organized group in the state except the medical profession has given attention to the subject of traffic hazards, the committee decided to request that local medical societies devote one program of the year to this subject, with the suggestion that such meetings be given as much publicity as possible. Accordingly, a letter containing such a request was addressed to the secretary of each county society. To date seven secretaries have replied, stating that they had accepted the suggestion or would present the matter to the society when meetings begin in the fall.

The committee felt that in this manner it might be possible to develop some responsible medical opinion as a result of this discussion which might be helpful in the solution of this difficult problem. The committee further desires to state that while it approves of the objectives of the so-called three "E" program of Engineering, Enforcement and Education, it is of the opinion that such a program will fall short of a control of traffic accidents. The committee believes that the major controllable factor in traffic accidents is excessive speed and until this is recognized and appropriate steps taken to limit speed, there will be no appreciable lowering of the appalling death rate now existing.

Respectfully submitted,

MURRAY N. HADLEY, M.D., *Chairman*,  
DONALD W. FERRARA, M.D.,  
VERNE K. HARVEY, M.D.,  
M. D. WYGANT, M.D.,  
GEORGE COLLETT, M.D.

#### REPORT OF THE STATE DIVISION OF PUBLIC HEALTH LIAISON COMMITTEE TO DEAL WITH SOCIAL SECURITY ACT

*House of Delegates, Indiana State Medical Association:*

Gentlemen:

The State Division of Public Health Liaison Committee to Deal with Social Security Act wishes to report that the committee has kept in close touch with the organization and work of the Social Security set-up under Dr. H. B. Mettel, and several times has met with Dr. Mettel's department, and communications from that department have been frequent.

Every effort has been made by them to advise and cooperate with our Association.

We approve of their report as presented in THE JOURNAL.

We recommend a continuance of this Liaison Committee.

Respectfully submitted,

E. O. ASHER, M.D., *Chairman*,  
J. C. CARTER, M.D.,  
STANLEY CLARK, M.D.

#### **REPORT OF THE COMMITTEE ON STUDENT DEBATES**

*House of Delegates, Indiana State Medical Association:*

Gentlemen:

Your chairman attended the Purdue Debate Conference, December 6 and 7, 1935, and the North Manchester College Indiana State Debates April 3 and 4, 1936.

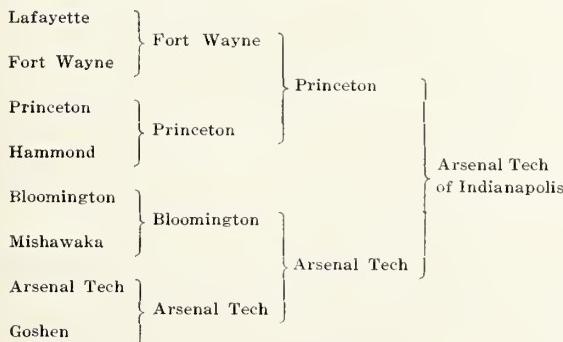
He made twenty-six talks before various county and district societies from October, 1934, to January, 1936.

Through the Central Press Clipping Service, Indianapolis, he received a total of thirteen packets of material which contained 262 clippings, 211 of which gave information of coming debates or similar speech contests upon socialized medicine. Of these clippings, fifty-one gave information concerning the results of the various debates and contests.

The total number of high school debate decisions rendered were 268, according to these clippings, 141 decisions rendered in favor of the affirmative and 127 decisions were in favor of the negative. Two hundred fourteen schools took part in these high school debates.

In addition to material gained from the clippings received, your chairman carried on an extensive correspondence with debate leaders and attended many of the debates in person.

The outcome of the finals of the Indiana High School Debate Conference which were held at North Manchester College, April 3 and 4, 1936, follows:



The affirmative and negative decisions were evenly divided except in one instance. The unevenness of the situation arose between Princeton and

Fort Wayne when both of the affirmative teams won.

The final count was: Negative, 6; Affirmative, 8.

Arsenal Tech, of Indianapolis, won the tournament and was eligible to compete in the National Contest which was held at Oklahoma City from May 4 to 8.

Your chairman devoted much time to the Fort Wayne High School Debate Team in person.

I wish to thank G. B. Parker, M.D., of Fort Wayne, for his interest and help. I also wish to thank the many other physicians throughout the state who gave valuable assistance.

Respectfully submitted,

LYMAN T. RAWLES, M.D., *Chairman*.

#### **REPORT OF COMMITTEE ON SECRETARIES' CONFERENCE**

*House of Delegates, Indiana State Medical Association:*

Gentlemen:

The annual meeting of the county medical society secretaries was held at the Columbia Club in Indianapolis on February 2, 1936.

Dr. Meyerding, secretary of the Minnesota State Medical Society; Dr. Frederic Elliott, chairman of the Committee on Medical Economics of the New York State Medical Society; Mr. Ross Garrett, Washington, D. C., and Dr. Albert McCown, of the Children's Bureau, Washington, D. C.; Dr. A. A. Hayden, Chicago, secretary of the Board of Trustees of the A. M. A., and Dr. Olin West, Chicago, secretary of the A. M. A., were guest speakers.

A large and enthusiastic audience attended.

Respectfully submitted,

A. M. MITCHELL, M.D., *Chairman*.  
M. H. BEDWELL, M.D.  
W. W. DUEMLING, M.D.  
D. A. COVALT, M.D.  
W. L. PORTEUS, M.D.  
H. B. METTEL, M.D.

#### **REPORT OF THE COMMITTEE ON THE CONTROL OF CANCER**

*House of Delegates, Indiana State Medical Association:*

Gentlemen:

The cancer problem is daily becoming of greater importance to the medical profession and public alike. Control of communicable disease is rapidly eliminating them as important causes of death, while chronic diseases, as cancer, are rapidly forging to the front in the death column.

Since the turn of the century cancer has risen

from sixth place to second place as a cause of death in this country, and today every tenth death in the United States is due to some form of malignant disease. In 1934, cancer killed more than 106 people out of each 100,000 population, and in Indiana this rate was nearly 120. The number of cancer deaths reported to the Indiana State Department of Health in 1935 was 3,907. Reliable authorities state that for each annual cancer death there are three living cancer patients. On this basis there are in Indiana today no less than 12,000 cancer patients. During the past 35 years a marked change has taken place in knowledge of ways and means for controlling cancer. It is now realized that many forms of cancer are curable when recognized early and treated adequately, and that cancer in certain sites can be prevented if warning signals of its approach are heeded and prompt action taken. Unfortunately these facts are not fully appreciated by many physicians and they continue to treat cancer as it was treated a generation ago.

While the specific exciting cause of all forms of cancer is not fully known, enough information on the prevention and control of it is available to bring a reduction in cancer deaths of from 30% to 50% in five years if this information is used fully by the profession and public alike. To accomplish this desirable end a program of education of all those concerned is necessary. The extent and location of facilities for the diagnosis and treatment of cancer should be determined; the place cancer occupies in the work of the general hospital should be ascertained; the probable number of cancer patients receiving professional care should be investigated; the economic costs of this disease should be studied. Factual information on these and related problems is lacking in all but a few states where detailed surveys have been made. The means for ascertaining them, at least in large part, are available to this Association under reasonable conditions.

Intelligent lay groups are showing an added interest in this problem. They are looking to the medical profession for guidance in this matter. They are asking more frequently for physical examinations in the absence of any known pathology to determine whether cancer may be present and are bewildered when some physicians make light of such requests and refuse to give the service asked for.

The club women of this country are organizing for a concerted educational program on the prevention and control of cancer, hoping in time to make facts about this disease as common knowledge as are facts about tuberculosis today. In this work they are looking to the medical profession to impart this information to lay groups, and if this Association does not accept this invitation when offered it will find itself on the defensive when the program is fully developed and in operation. The cancer control program is in the hands of the medical profession where it belongs, but to

maintain that control medical organizations must direct lay interest into proper channels and co-operate with worthwhile educational efforts. Co-operation will make governmental interference unnecessary in the cancer control field; refusal to participate will probably bring public appeals to the legislature to take over control of the cancer problem as it has taken over many similar problems under the name of public health.

Believing that cancer is the greatest challenge now facing the medical profession in this state and throughout the world, your Cancer Committee recommends:

1. That the medical profession as individuals and groups take an added interest in the cancer problem in Indiana.
2. That at least one meeting annually of each county and district society, and that one session of each annual meeting of the State Association be devoted to cancer discussion.
3. That when speakers appear before lay groups they be provided with accurate approved data on cancer and be requested to confine their addresses within the limits of the data furnished.
4. That this Association cooperate as far as its resources permit with all reasonable programs of cancer education that may be sponsored by ethical responsible groups in this field.
5. That the American Society for the Control of Cancer be invited to make a cancer survey of Indiana along the lines of similar surveys it has made in Michigan, Illinois, Missouri, and other states in the midwest, submitting to this Association a report of its findings with recommendations for an improved service to cancer patients of this state.

Respectfully submitted,

CHAS. W. MYERS, M.D., *Chairman.*  
PAUL W. FERRY, M.D.  
E. M. PITKIN, M.D.

#### REPORT OF THE HISTORIAN

*House of Delegates, Indiana State Medical Association:*

Gentlemen:

As historian, the work of the past year has given me much pleasure, and I hope the printed results have been of some interest to you.

The first few articles in THE JOURNAL dealt with medical education and especially with the influence that the first medical school of the West, Transylvania University, had on the practice of medicine in Indiana. The Mitchell-Dunlap-Coe controversy published in October demonstrated one result of the differences in education and training of these

physicians. Such controversies occurred in all parts of the state, and I hope in the next year to present more of these, and to complete the picture of the influence each medical school had upon the state.

These controversies stimulated a search of records for information about the first medical laws and the formation of the medical districts in Indiana. I have given you what is available concerning the first medical law ever passed by an Indiana legislature, but I hope, with the assistance of physicians in the state, to find whether the John Shravn who signed the petition praying for the law, was a physician, and just why he should have been the one to present it.

Many of the early Indiana politicians held degrees in medicine and the influence of medical schools on the history of the West may be of even greater importance when all of these are discovered. Perhaps the committee planning for the celebration of the passing of the Ordinance of 1787 will take into account the fact that it was written by a practicing physician and given to another physician to enforce. Hoosiers seem to have had no objection to physicians as governors, but there is an interesting explanation of their antipathy to medical judges.

In the recent numbers of THE JOURNAL you have read biographies of the fifteen medical censors named by the first legislature of 1816. It is to be regretted that pictures of all fifteen are not available. These men were outstanding physicians of their day and it is a question whether their influence on Indiana has been greater politically or medically.

I hope to proceed with a discussion of the organization of the other district societies and to give some account of the lives of the doctors who took part in them. The activities of each physician have to be studied from a professional and a communal point of view, in order to arrive at any concept of his influence on medical history, and it is my hope that with your assistance much information may be discovered and made available.

A picture of each of the past presidents of the Association is in the Association headquarters office. There is at hand much historical information dealing with their lives. Short biographies of H. G. Livingston Dunlap, William Thomas Samuel Cornett, Asahel Clapp and Nathaniel Field already have been printed. Sketches of the other ninety-three physicians are in preparation.

Indiana has been most prolific in her production of medical publications, and a history of these and their editors will be available soon, as well as accounts of epidemics and diseases prevalent in early Indiana, such as the milk-sickness article last February.

I wish to extend my sincere thanks to the physicians, librarians, historians and others who have been so generous with their assistance in this work,

and who have made possible the systematic collection of information about the history of medicine in Indiana.

Respectfully submitted,

L. G. ZERFAS, M.D., *Historian.*

#### REPORT OF THE AUDITING COMMITTEE

*House of Delegates, Indiana State Medical Association:*

Gentlemen:

The Auditing Committee of the Indiana State Medical Association met at the Indiana National Bank in Indianapolis on July 31, 1936, and examined the securities held by the Association. All of the bonds, as listed in the Statement of Assets, All Funds, at December 31, 1935 (Exhibit B, compiled by the George S. Olive and Company, certified public accountants, and contained in the treasurer's annual report, page 455), were found by the committee to be in order.

Respectfully submitted,

O. B. NORMAN, M.D., *Chairman,*  
W. F. HUGHES, M.D.,  
E. B. RINKER, M.D.

#### DELEGATES TO THE INDIANA STATE MEDICAL ASSOCIATION

Delegate	Alternate
ADAMS COUNTY	
ALLEN COUNTY	
J. L. Wyatt, Fort Wayne	M. B. Catlett, Fort Wayne
M. R. Lohman, Fort Wayne	E. R. Carlo, Fort Wayne
Wm. C. Wright, Fort Wayne	D. W. Schafer, Fort Wayne
BARTHOLOMEW COUNTY	
M. C. McKain, Columbus	R. K. Schmitt, Columbus
BENTON COUNTY	
V. L. Turley, Fowler	W. H. Altier, Fowler
BOONE COUNTY	
E. A. Rainey, Lebanon	Ralph Harvey, Whitestown
CARROLL COUNTY	
Charles Wise, Camden	C. C. Crampton, Delphi
CASS COUNTY	
B. W. Egan, Logansport	
CLARK COUNTY	
CLAY COUNTY	
Fred C. Dilley, Brazil	J. F. Maurer, Brazil
CLINTON COUNTY	
M. F. Boulden, Frankfort	
CRAWFORD COUNTY	
DAVIESS-MARTIN COUNTIES	
S. L. McPherson, Washington	W. O. McKittrick, Washington
DEARBORN-OHIO COUNTIES	
O. H. Stewart, Aurora	J. C. Elliott, Guilford
DECATUR COUNTY	
H. S. McKee, Greensburg	
DEKALB COUNTY	
DELAWARE-BLACKFORD COUNTIES	
T. R. Owens, Muncie	C. L. Bock, Muncie
DUBOIS COUNTY	
ELKHART COUNTY	
A. C. Yoder, Coshen	C. W. Haywood, Elkhart

FAYETTE-FRANKLIN COUNTIES	
L. N. Ashworth, Connersville	R. S. Sappenfield, Brookville
FLOYD COUNTY	
C. E. Briscoe, New Albany	Wm. Winstandley, New Albany
FOUNTAIN-WARREN COUNTIES	
Simeon Lambright, Covington	A. C. Holley, Attica
FULTON COUNTY	
A. E. Stinson, Rochester	Mark Piper, Rochester
GIBSON COUNTY	
Carl Clark, Oakland City	Virgil McCarty, Princeton
GRANT COUNTY	
L. D. Holliday, Fairmount	B. C. Dale, Marion
GREENE COUNTY	
H. B. Turner, Bloomfield	King Hull, Bloomfield
HAMILTON COUNTY	
Russell Havens, Cicero	Ray Shanks, Noblesville
HANCOCK COUNTY	
Jesse E. Ferrell, Fortville	Robert E. Kinneman, Greenfield
HARRISON COUNTY	
William E. Amy, Corydon	
HENDRICKS COUNTY	
HENRY COUNTY	
Walter M. Stout, Newcastle	
HOWARD COUNTY	
H. M. Rhorer, Kokomo	R. M. Evans, Russiaville
HUNTINGTON COUNTY	
Myers Deems, Huntington	R. D. Meiser, Huntington
JACKSON COUNTY	
H. P. Graessle, Seymour	L. H. Osterman, Seymour
JASPER-NEWTON COUNTIES	
W. C. Mathews, Kentland	A. R. Kresler, Rensselaer
JAY COUNTY	
John Lansford, Redkey	G. V. Cring, Portland
JEFFERSON COUNTY	
S. A. Whitsitt, Madison	A. G. W. Childs, Madison
JENNINGS COUNTY	
D. W. Matthews, North Vernon	J. H. Green, North Vernon
JOHNSON COUNTY	
Harry E. Murphy, Franklin	Porter Myers, Edinburgh
KNOX COUNTY	
M. S. Fox, Bicknell	J. F. Reilly, Vincennes
KOSCIUSKO COUNTY	
C. E. Thomas, Leesburg	
LAGRANGE COUNTY	
W. O. Hildebrand, Topeka	Harry Irwin, LaGrange
LAKE COUNTY	
J. A. Parramore, Crown Point	G. M. Cook, Hammond
T. W. Oberlin, Hammond	H. G. Cole, Hammond
R. N. Bills, Gary	O. F. Benz, Whiting
A. J. Lauer, Whiting	David Bopp, Whiting
LAPORTE COUNTY	
J. W. Kelly, LaPorte	J. R. Phillips, Michigan City
LAWRENCE COUNTY	
W. H. McKnight, Bedford	Morrell Simpson, Bedford
MADISON COUNTY	
F. C. Guthrie, Anderson	O. A. Kopp, Anderson
MARION COUNTY	
Henry S. Leonard, Indianapolis	C. A. Stayton, Indianapolis
R. L. Smith, Indianapolis	P. E. McCown, Indianapolis
O. W. Sicks, Indianapolis	J. K. Berman, Indianapolis
Ben L. Moore, Indianapolis	Howard B. Mettel, Indianapolis
Rollin H. Moser, Indianapolis	J. M. Whitehead, Indianapolis
E. O. Asher, New Augusta	J. Wm. Wright, Indianapolis
H. G. Morgan, Indianapolis	C. O. McCormick, Indianapolis
Max Bahr, Indianapolis	Walter F. Kelly, Indianapolis
O. H. Bakemeier, Indianapolis	Lyman R. Pearson, Indianapolis
Foster Hudson, Indianapolis	Harry L. Foreman, Indianapolis
MARSHALL COUNTY	
T. C. Eley, Plymouth	
MIAMI COUNTY	
S. D. Malouf, Peru	O. R. Lynch, Peru
MONROE COUNTY	
Melville Ross, Bloomington	William Reed, Bloomington
MONTGOMERY COUNTY	
T. Z. Ball, Crawfordsville	George S. Collett, Crawfordsville
MORGAN COUNTY	
Charles L. Aker, Mooresville	Leon Gray, Martinsville
NOBLE COUNTY	
W. F. Carver, Albion	J. E. Luckey, Wolf Lake
ORANGE COUNTY	
C. E. Boyd, West Baden	George Dillinger, French Lick
OWEN COUNTY	
Boaz Yocom, Coal City	R. H. Richards, Patricksburg
PARKE-VERMILLION COUNTIES	
C. S. White, Rosedale	S. C. Darroch, Cayuga
PERRY COUNTY	
PIKE COUNTY	
PORTER COUNTY	
POSEY COUNTY	
Harold E. Ropp, New Harmony	Paul Boren, Poseyville
PULASKI COUNTY	
PUTNAM COUNTY	
C. C. Collins, Roachdale	V. Earle Wiseman, Greencastle
RANDOPH COUNTY	
R. B. Engle, Farmland	Arvin Henderson, Ridgeville
RIPLEY COUNTY	
John Bigham, Batesville	Arthur Whitlatch, Milan
RUSH COUNTY	
Donald I. Dean, Rushville	Frank H. Green, Jr., Rushville
ST. JOSEPH COUNTY	
A. S. Giordano, South Bend	Alfred Ellison, South Bend
M. D. Wygant, Mishawaka	K. T. Knode, South Bend
P. J. Birmingham, South Bend	J. A. Wilson, South Bend
SCOTT COUNTY	
SHELBY COUNTY	
B. G. Keeney, Shelbyville	R. M. Nigh, Shelbyville
SPENCER COUNTY	
STEUBEN COUNTY	
D. W. Creel, Angola	G. N. Lake, Pleasant Lake
SULLIVAN COUNTY	
J. T. Oliphant, Farmersburg	J. H. Crowder, Jr., Sullivan
George Copeland, Vevay	M. F. Daubenheyer, Patriot
TIPPECANOE COUNTY	
Earl Van Reed, Lafayette	O. L. McCay, Romney
Gordon A. Thomas, Lafayette	R. R. Calvert, Lafayette
TIPTON COUNTY	
Harry Grishaw, Tipton	Homer Shoup, Sharpsville
VANDERBURGH COUNTY	
L. E. Fritsch, Evansville	B. D. Ravdin, Evansville
H. M. Baker, Evansville	A. M. Hayden, Evansville
VIGO COUNTY	
O. R. Spigler, Terre Haute	E. O. Nay, Terre Haute
R. G. Harkness, Terre Haute	A. W. Cavins Terre Haute
WABASH COUNTY	
Ira Perry, North Manchester	A. J. Steffen, Wabash
WARRICK COUNTY	
WASHINGTON COUNTY	
WAYNE-UNION COUNTIES	
William Thompson, Liberty	C. J. Hufnagel, Richmond
WELLS COUNTY	
O. G. Hamilton, Bluffton	H. D. Taylor, Bluffton
WHITE COUNTY	
WHITLEY COUNTY	
Paul A. Garber, South Whitley	O. F. Lehberg, Columbia City

**LIST OF PRESIDENTS OF THE INDIANA STATE  
MEDICAL ASSOCIATION SINCE ITS  
ORGANIZATION**

Name and Residence	Elected	Served
*Livington Dunlap, Indianapolis	1849	1849
*William T. S. Cornett, Versailles	1849	1850
*Asahel Clapp, New Albany	1850	1851
*George W. Mears, Indianapolis	1851	1852
*Jeremiah H. Brower, Lawrenceburg	1852	1853
*Elizur H. Deming, Lafayette	1853	1854
*Madison J. Bray, Evansville	1854	1855
*William Lomax, Marion	1855	1856
*Daniel Meeker, LaPorte	1856	1857
*Talbott Bullard, Indianapolis	1857	1858
*Nathan Johnson, Cambridge City	1858	1859
*David Hutchinson, Mooresville	1859	1860
*Benjamin S. Woodworth, Fort Wayne	1860	1861
*Theophilus Parvin, Indianapolis	1861	1862
*James F. Hibberd, Richmond	1862	1863
*John Sloan, New Albany	1863	1864
*John Moffet (acting), Rushville	1864	1864
*Samuel M. Linton, Columbus	1864	1864
*Myron H. Harding, Lawrenceburg	1865	1865
*Wilson Lockhart (acting), Danville	1865	1866
*Vierling Kersey, Richmond	1866	1867
*John S. Bobbs, Indianapolis	1867	1868
*Nathaniel Field, Jeffersonville	1868	1869
*George Sutton, Aurora	1869	1870
*Robert N. Todd, Indianapolis	1870	1871
*Henry P. Ayres, Fort Wayne	1871	1872
*Joel Pennington, Milton	1872	1873
*Isaac Casselberry, Evansville	1873	1874
*Wilson Hobbs, Knightstown	1873	1874
*Richard E. Haughton, Richmond	1874	1875
*John H. Helm, Peru	1875	1876
*Samuel S. Boyd, Dublin	1876	1877
*Luther D. Waterman, Indianapolis	1877	1878
*Louis Humphreys, South Bend	1878	—
*Benj. Newland (acting) Bedford (v.-p.)	1878	1879
*Jacob R. Weist, Richmond	1879	1880
*Thomas B. Harvey, Indianapolis	1880	1881
*Marshall Sexton, Rushville	1881	1882
*William H. Bell, Logansport	1882	1883
*Samuel E. Munford, Princeton	1883	1884
*James H. Woodburn, Indianapolis	1884	1885
*James S. Gregg, Fort Wayne	1885	1886
*General W. H. Kemper, Muncie	1886	1887
*Samuel H. Charlton, Seymour	1887	1888
*William H. Wishard, Indianapolis	1888	1889
*James D. Gatch, Lawrenceburg	1889	1890
*Gonsolvo C. Snythe, Greencastle	1890	1891
*Edwin Walker, Evansville	1891	1892
*George F. Beasley, Lafayette	1892	1893
*Charles A. Daugherty, South Bend	1893	1894
*Elijah S. Elder, Indianapolis	1894	1895
Charles S. Bond (acting), Richmond	1894	1895
*Miles F. Porter, Fort Wayne	1895	1896
*James H. Ford, Wabash	1896	1897
William N. Wishard, Indianapolis	1897	1898
John C. Sexton, Rushville	1898	1899
*Walker Schell, Terre Haute	1899	1900
*George W. McCaskey, Fort Wayne	1900	1901
*Alembert W. Brayton, Indianapolis	1901	1902
John B. Berteling, South Bend	1902	1903
*Jonas Stewart, Anderson	1903	1904
*George T. MacCoy, Columbus	1904	1905
*George H. Grant, Richmond	1905	1906
*George J. Cook, Indianapolis	1906	1907
*David C. Peyton, Jeffersonville	1907	1908
*George D. Kahlo, French Lick	1908	1909
*Thomas C. Kennedy, Shelbyville	1909	1910
*Frederic C. Heath, Indianapolis	1910	1911
*William F. Howat, Hammond	1911	1912
*A. C. Kimberlin, Indianapolis	1912	1913
*John P. Salb, Jasper	1913	1914

*Frank B. Wynn, Indianapolis	1914	1915
*George F. Keiper, Lafayette	1915	1916
*John H. Oliver, Indianapolis	1916	1917
Joseph Rilus Eastman, Indianapolis	1917	1918
William H. Stemm, North Vernon	1918	1919
Charles H. McCully, Logansport	1919	1920
*David Ross, Indianapolis	1920	1921
William R. Davidson, Evansville	1921	1922
*Charles H. Good, Huntington	1922	1923
*Samuel E. Earp, Indianapolis	1923	1924
E. M. Shanklin, Hammond	1924	1925
C. N. Combs, Terre Haute	1925	1926
Frank W. Gregor, Indianapolis	1926	1927
George R. Daniels, Marion	1926	1928
Charles E. Gillespie, Seymour	1927	1929
Angus C. McDonald, Warsaw	1928	1930
Alois B. Graham, Indianapolis	1929	1931
Franklin Smith Crockett, Lafayette	1930	1932
Joseph H. Weinstein, Terre Haute	1931	1933
Everett E. Padgett, Indianapolis	1932	1934
*Walter J. Leach, New Albany	1933	1935
Roscoe Loyd Sensenich, South Bend	1934	1936

\* Deceased.

**DATA REGARDING PREVIOUS ANNUAL SESSIONS**

Year	Annual Session	Place	Number
1908	59th	French Lick	312
1909	60th	Terre Haute	421
1910	61st	Fort Wayne	450
1911	62nd	Indianapolis	748
1912	63rd	Indianapolis	590
1913	64th	West Baden	312
1914	65th	Lafayette	527
1915	66th	Indianapolis	646
1916	67th	Fort Wayne	381
1917	68th	Evansville	270
1918	69th	Indianapolis	388
1919	70th	Indianapolis	—
1920	71st	South Bend	421
1921	72nd	Indianapolis	550
1922	73rd	Muncie	522
1923	74th	Terre Haute	823
1924	75th	Indianapolis	1,012
1925	76th	Marion	800
1926	77th	West Baden	900
1927	78th	Indianapolis	1,500
1928	79th	Gary	892
1929	80th	Evansville	814
1930	81st	Fort Wayne	1,115
1931	82nd	Indianapolis	1,033
1932	83rd	Michigan City	904
1933	84th	French Lick	637
1934	85th	Indianapolis	1,814
1935	86th	Gary	1,011

## EXHIBITORS 1936 SESSION

## Booth No.

- 1—Akron Surgical House, Inc., Indianapolis.
- 2—Emerson Drug Company, Baltimore, Md.
- 3 & 4—Studebaker Corporation, South Bend.
- 6—White-Haines Optical Company, Columbus, O.
- 7—Lea & Febiger, Philadelphia, Pa.
- 8 & 9—Frank S. Betz Company, Hammond.
- 11—Phillip Morris & Company, Ltd., New York City.
- 12—Bard-Parker Company, Inc., Danbury, Conn.
- 13—H. J. Heinz Company, Pittsburgh, Pa.
- 14—Lederle Laboratories, Inc., New York City.
- 15—Middlewest Instrument Company, Chicago.
- 16—Snuggle Rug Company, Goshen.
- 17—A. S. Aloe Company, St. Louis, Mo.
- 18—Bendix Products Corporation, South Bend.
- 19 & 20—Pitman-Moore Company, Indianapolis.
- 21—Medical Protective Company, Wheaton, Ill.
- 22—American Hospital Supply Corporation, Chicago.
- 24—Mellin's Food Company, Boston, Mass.
- 25—Gerber Products Company, Fremont, Mich.
- 26—South Bend Pharmacy Club, South Bend.
- 27—Mead Johnson and Company, Evansville.
- 28—Libby, McNeill & Libby, Chicago.
- 29—W. B. Saunders Company, Philadelphia, Pa.
- 30—Lepel High Frequency Laboratories, Inc., New York City.
- 31 & 38—The Studebaker Corporation, South Bend.
- 32—Petrolagar Laboratories, Inc., Chicago.
- 33—Kellogg Company, Battle Creek, Mich.
- 34—Horlick's Malted Milk Corporation, Racine, Wis.
- 36—The Jones Surgical Supply Company, Cleveland, O.
- Lobby—The South Bend Bait Company, South Bend.

BOOTH NO. 1—AKRON SURGICAL HOUSE  
Indianapolis

The Akron Surgical House, Inc., will display in Booth No. 1 a complete line of surgical instruments. The Bard-Parker Lahey Lok line will be featured. Allison furniture and the latest McIntosh Brevatherm short wave Diathermy also will be shown.

Mr. T. W. Marshall will be in charge.

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BOOTH NO. 2—EMERSON DRUG COMPANY  
Baltimore, Maryland

The Emerson Drug Company, through one of their subsidiaries, manufacture citric acid, caffeine and acetanilid.

Modern laboratories and equipment—a staff which includes graduate registered physicians, pharmacists and chemists—and half a century of skill and experience, result in the reliability and pharmaceutical excellence of their products.

Within recent years they have carried on an intensive program of research relative to the effects of acetanilid, and have presented clinical and experimental facts to replace previous unsupported opinions concerning acetanilid.

Our associate medical director—Walter E. Lowthian, M.D.—will be in charge of the exhibit at the Indiana State Medical Convention.

## BOOTH NO. 6—WHITE-HAINES OPTICAL COMPANY

## Columbus

The exhibit of the White-Haines Optical Company, distributors of Blue Ribbon Ophthalmic Supplies with general offices located at Columbus, Ohio, will feature the latest developments of optical science. White-Haines have an Indianapolis office located in the Hume Mansur Building.

Lenses to be featured are the Panoptik Bifocal (including the improved cataract lens), and the Orthogon Soft-Lite lens that provides glare protection with wide vision correction. There will be a display of Bausch & Lomb instruments, including the Clason Visual Acuity Meter, the Binocular Ophthalmoscope, and the Slit Lamp. Also to be displayed is the instrument that has aroused so much interest throughout the country—the Wottring Rotoscope that simplifies the whole procedure of Orthoptic Training. The Rotoscope, first shown at the Academy meeting last year in Cincinnati, is now being used all over the country by ophthalmologists, hospitals, and clinics.

The White-Haines exhibit will be in charge of E. F. Wildermuth, general sales manager from Columbus, Ohio, with Donald Rowles, manager of Whites-Haines, of Indianapolis; Jack Shreffler and Robert Tippett, salesmen, in attendance.

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## BOOTH NO. 7—LEA AND FEBIGER

## Philadelphia

Under the direction of Mr. F. F. Robbins, Lea & Febiger will exhibit important new medical publications and new editions of other standard medical works. Among the new works will be Davis' Neurological Surgery, Hawes & Stone's Diagnosis and Treatment of Pulmonary Tuberculosis, Bridges' Food Analyses, Berglund & Medes on the Kidney, Graham, Singer & Ballon on Surgical Diseases of the Chest, Prinz & Greenbaum on Diseases of the Mouth and McCulloch's Disinfection & Sterilization. New editions are also shown of Peter's Extra-Ocular Muscles, Rhinehart's Roentgenographic Technique, DuBois' Basal Metabolism, Knowles' Dermatology, Boyd's Pathology of Internal Diseases, Joslin's Treatment of Diabetes, Laboratory Methods of the U. S. Army, Speed's Fractures & Dislocations, Pemberton on Arthritis, Jelliffe & White on Nervous Diseases, Kovac's Electrotherapy and Bridges' Dietetics.

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## BOOTH NOS. 8 and 9—FRANK S. BETZ COMPANY

## Hammond

The Frank S. Betz Company will exhibit in Booths numbers 8 and 9 complete line of chrome-plated surgical instruments, physicians' leather bags of various styles, steel instrument cabinets, sterilizer cabinet and chrome-plated sterilizer and other pieces of furniture of the latest design.

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## BOOTH NO. 11—PHILIP MORRIS &amp; CO., LTD.

## New York City

Philip Morris and Company, Ltd., Inc., will demonstrate the method by which it was found that Philip Morris cigarettes, in which diethylene glycol is used as the hygroscopic agent, are less irritating than ordinary cigarettes in which glycerine is employed.

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## BOOTH NO. 12—BARD-PARKER COMPANY, INC.

## Danbury, Conn.

The Bard-Parker Company will demonstrate at Booth No. 12 the outstanding features of their Rib-Back blade incorporating new standards of cutting efficiency and economy. Also will be shown a complete line of stainless steel scissors with renewable edges which eliminates resharpening, and a selection of quality forceps with the Lahey lock. A very interesting demonstration of rustproof sterilization for surgical instruments will be given.

Mr. George E. Clark will be in charge of the exhibit.

**BOOTH NO. 13—H. J. HEINZ COMPANY**  
Pittsburgh

H. J. Heinz Company, Pittsburgh, Pennsylvania, invites you to visit their display of Tomato Juice, Breakfast Cereals and Strained Foods, especially prepared for infant and convalescent feeding.

Register for the second edition of their Nutritional Charts. This revised edition, published in December, 1935, contains, along with the Vitamin, Mineral and Food Composition Charts, new sections on daily requirements and food allergy.

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**BOOTH NO. 14—LEDERLE LABORATORIES, INC.**  
New York City

Scarlet Fever Streptococcus Antitoxin will be the central point around which the Lederle exhibit focuses. The Globulin Modified Antitoxins mark a distinct advance in scarlet fever therapy. Since Lederle has introduced these highly refined antitoxins, the most notable advance has been in the more frequent employment of Scarlet Fever Streptococcus Antitoxin. Formerly, the reactions served to lessen its general use, but with the relative freedom from reactions following the employment of the Globulin Modified preparation, hesitancy has disappeared and the antitoxin is being freely employed for the treatment of active cases with satisfactory results.

Many other items also will be shown among which is the highly concentrated Solution Liver Extract Parenteral, which contains in a 1 c.c. volume, the antianemic substance from 100 grams of liver. In the use of this product, the 1 c.c. vial at a seven-day interval will usually maintain the red cell count at or near normal.

Antipneumococcal Serum, together with other items, will be included in the exhibit material. Visit the Lederle exhibit at Booth No. 14.

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**BOOTH NO. 15—MIDDLEWEST INSTRUMENT COMPANY**  
Chicago

Be sure to stop at Booth No. 15 when you are visiting the technical exhibits and get a few very interesting and educational facts on the new Jones Motor Basal unit.

It is Council-accepted, guaranteed for life, contains no water, and embodies many exclusive features which will interest you.

Mr. Jack Reynolds and Mr. Niedelson will be in charge of the booth.

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**BOOTH NO. 16—SNUGGLE RUG COMPANY**  
Goshen

Snuggle Crib Covers keep baby covered all night long so he may sleep soundly and long. Mother's sleep is uninterrupted. Baby can't kick off the covers, slip under them, or crawl out of them, which helps avoid colds due to exposure. Baby may sleep with his arms overhead or down at his sides, on his stomach, side or back and turn from one to the other with perfect freedom. Babies love them. The soft tubular neck-band which flattens when pressed against and has sufficient bulk and stiffness to prevent binding, makes it easy for baby to turn over. Snuggle Crib Covers are easily attached or removed from the crib with Jiffy Joins. The zipper opening in the front of the garment makes it easy to put baby to bed or to take him up. The cut-out back design of the garment keeps them dry.

\* \* \*

**BOOTH NO. 17—A. S. ALOE COMPANY**  
St. Louis

The A. S. Aloe Company, in Booth No. 17, will show a complete general line of instruments and equipment, offering everything for the doctor and hospital. A line of rustless steel instruments will be offered at a special discount. In addition will be shown the new Aloe Short Wave Diatherm and the new style Elliott machine.

The Aloe Company's Indiana representatives, Mr. Curtis and Mr. Oldfather, will be in attendance to serve in any way possible.

**BOOHTS NOS. 19 and 20—PITMAN-MOORE COMPANY**  
Indianapolis

Pitman-Moore Company will again feature at their exhibit booth "Ye Olde and the New in the Prevention and Treatment of Disease," which attracted so much attention and interest at the Gary meeting last year. The exhibit has been revised and amplified, and will prove of renewed interest to those who saw their display of last year. It presents many odd and unusual medical beliefs of ancient times as well as many of the medical superstitions to be encountered right here in Indiana at the present time.

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**BOOTH NO. 21—THE MEDICAL PROTECTIVE COMPANY**  
Wheaton, Illinois

The most exacting requirements of adequate liability protection are those of the professional liability field. Representatives thoroughly trained in professional liability underwriting invite you to confer with them at their exhibit. These are the representatives of The Medical Protective Company, specialists in providing protection for professional men.

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**BOOTH NO. 22**  
**AMERICAN HOSPITAL SUPPLY CORPORATION**  
Chicago

The American Hospital Supply Corporation will exhibit at its booth at the Indiana State Medical Association Convention a large number of its hospital specialties. These will include the Oxygenaire, the Tomac Oxygen Insuflator, the MacEachern O. B. Bed, the Mercy Autopan Bed. There also will be several other products on display which are the exclusive development of the American Hospital Supply Corporation.

There will be regular demonstrations of the setup on the technique of the administration of Baxter Intravenous Solutions in Vacoliters. These demonstrations will be supervised by Mr. E. W. Erikson.

Mr. W. M. Morton will be in charge of the display of the newly-announced line of Tomac Furniture for hospitals.

These men, together with Mr. Howard M. Henderson, will present to visitors a representative group of hospital products from an unusually complete line of hospital supplies.

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**BOOTH NO. 24—MELLIN'S FOOD COMPANY**  
Boston

Fitting the food to the baby, the correct approach to bottle feeding, is the underlying principle of the workable method that employs Mellin's Food as the milk modifier.

Messrs. Hazeltine and Poulson, who are well qualified to discuss this matter, will be present and physicians are cordially invited to visit Booth No. 24.

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**BOOTH NO. 25—GERBER PRODUCTS COMPANY**  
Fremont, Michigan

Gerber's Strained Foods for infant feeding and special diets will be on display in Booth No. 25. There will be charts and illustrations of the Shaker-cooker method of processing.

Gerber's have two types of literature, some for distribution to patients and some for professional use only. Samples of the foods and the literature for examination, will be sent to registrants at the booth.

Harriet Davis, R. N., and R. W. Decker will be in charge of the booth.

**BOOTH NO. 27—MEAD JOHNSON & COMPANY**  
Evansville

Mead Johnson & Company will have on exhibit its complete line of infant diet materials including Dextri-Maltose Nos. 1, 2 and 3, Dextri-Maltose with Vitamin B, Mead's Standardized Cod Liver Oil, Mead's Viosterol in Oil, Mead's Cod Liver Oil with Viosterol, Mead's Viosterol in Halibut Liver Oil (liquid and capsules), Mead's Halibut Liver Oil, Mead's Oleum Percomorphum, 50% (liquid and capsules), Mead's Cod Liver Oil Fortified with Percomorph Liver Oil, Mead's Brewers Yeast (tablets and powder), Pablum, Mead's Cereal, Sobee, Mead's Powdered Protein Milk, Mead's Powdered Lactic Acid Milk Nos. 1 and 2, Mead's Powdered Whole Milk, Alacta, Recolac and Casec.

A feature of the Mead Johnson exhibit will be a display of the Percomorph group of products; namely, Mead's Oleum Percomorphum, 50% in liquid and in capsule form, and Mead's Cod Liver Oil Fortified with Percomorph Liver Oil.

There also will be for the examination of physicians a complete line of Mead's services such as "Diets for Children from Four Months to Four Years," height and weight charts, etc., all of which are free to members of the medical profession in any quantity desired.

Representatives will be on hand to meet their friends and to discuss the application of any of the Mead products to infant feeding problems.

\* \* \*

**BOOTH NO. 28—LIBBY, MCNEILL & LIBBY**  
Chicago

The most outstanding recent development in the science of infant feeding—Libby's Homogenized Foods. This new process mechanically ruptures the food cells of vegetables, fruits, and cereals, refines the cellulose tissue, releases the contained nutriment, and makes these foods more easy to digest and more completely assimilated. Photomicrographs of strained and homogenized foods graphically illustrate the advantages of the newer process.

The Research Laboratories of Libby, McNeill & Libby invites you to inspect their display in Booth No. 28. Mr. J. C. Wilson will be in attendance.

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**BOOTH NO. 29—W. B. SAUNDERS COMPANY**  
Philadelphia

The W. B. Saunders Company, publishers, will exhibit their entire list of 250 titles. Of particular importance are the many new books and new editions, including Wolf's Endocrinology in Modern Practice, Berens' Eye Diseases, Levine's Clinical Heart Diseases, New York Academy Graduate Fortnight Lectures on Respiratory Diseases, Rehfuss and Nelson's Medical Treatment of Gallbladder Disease, new edition of MacCallum's Pathology, new edition of Boyd's Preventive Medicine, Jackson's Diseases of the Air and Food Passages of Foreign Body Origin, Rehfuss and Nelson's Medical Treatment of Gallbladder Disease, Medical Clinics of North America, Surgical Clinics of North America, Christopher's new complete Surgery, new edition of Christopher's Minor Surgery, the current Mayo Clinic Volume, Thoma's Oral Diagnosis and Treatment Planning, Stone's Brights Disease and Arterial Hypertension, Majors' Physical Diagnosis, Hinman's Urology, Skinners' Dental Materials, Schumann's Textbook of Obstetrics, Howell's Physiology.

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**BOOTH NO. 30—LEPEL HIGH FREQUENCY LABORATORIES**  
New York, N. Y.

Lepel High Frequency Laboratories will exhibit an ultra short wave machine and a portable, as well as a mobile, short wave machine, together with ultra violet equipment which can be energized directly from the short wave machine without the necessity of separate generators.

**BOOTH NO. 32—PETROLAGAR LABORATORIES, INC.**  
Chicago

There are now five types of Petrolagar, each of which serves a special purpose.

To enable the physician to fit the treatment to the particular need of the patient, these five types of Petrolagar afford a range of laxative potency which will meet practically every requirement of successful bowel management.

Petrolagar is a mechanical emulsion of liquor petrolatum (65% by volume) and agar-agar, deliciously flavored and pleasant to take. It does not upset digestion, mixes easily with the intestinal content, acts as unabsorbable moisture and has less tendency to leakage. Petrolagar is the original oil and agar emulsion accepted by the Council on Pharmacy and Chemistry of the American Medical Association.

Samples and further information may be obtained from our representative, Mr. R. R. Osborn, at Booth No. 32.

\* \* \*

**BOOTH NO. 33—KELLOGG COMPANY**  
Battle Creek, Michigan

Visit the Kellogg booth for a cup of refreshing Kaffee Hag Coffee. Bottle exhibits showing the stages in decaffeinating coffee are displayed and complete explanation of process is given. Reprints of reports covering research carried on at the University of Michigan to determine the effects of caffeine, are available.

The exhibit is in charge of Miss Regina Gabriel of the Home Economics Department staff at Battle Creek.

\* \* \*

**BOOTH NO. 34—HORLICK'S MALTED MILK CORPORATION**  
Racine, Wisconsin

The Horlick's Malted Milk Corporation will exhibit Horlick's, the Original Malted Milk, in both natural and chocolate flavors, powder and tablet forms.

Among the special uses of Horlick's Malted Milk which will be featured are its advantages in the liquid diet, notably in cases of tuberculosis and other wasting diseases, during and after pneumonia, in gastric and duodenal ulcers and acidosis. Horlick's has also been proved by its results, for over fifty years, as a dependable food in infant feeding, even in difficult cases.

Dr. Glasgow and Mr. Cain will be in charge of the exhibit.

\* \* \*

**BOOTH NO. 36—JONES SURGICAL SUPPLY CO.**  
Cleveland, Ohio

The Jones Surgical Supply Company will present the very latest developments in surgical instruments and equipment, including the new King Thermaester and several models of the McIntosh Brevatherm, Short Wave Diathermy line.

The company's Indiana representatives, Dr. C. A. McCormick, Mr. F. O. Swonger, Mr. J. D. Archer, and Mr. L. G. Voorhees, will be in attendance.

\* \* \*

**BOOTH IN LOBBY—SOUTH BEND BAIT COMPANY**  
South Bend, Indiana

This display will consist of some Jumbo sized baits, including the Trix-Oreno, Bass-Oreno, Surf-Oreno, and Pike-Oreno. These are three or four feet long each and have created a great deal of comment at fifteen or twenty outdoor shows at which they have been exhibited. Also, there will be a spool of Black-Oreno line, the spool of which is about 18 inches in diameter.

There will be a selection of rods for both fresh and salt-water fishing on display.

**THE JOURNAL**

OF THE

**INDIANA STATE MEDICAL ASSOCIATION**  
DEVOTED TO THE INTERESTS OF THE MEDICAL  
PROFESSION OF INDIANA

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SEPTEMBER, 1936

**EDITORIALS****A PLAN FOR SYPHILIS CONTROL**

Complementing the editorial in the July issue of **THE JOURNAL** on "Publicity Concerning Social Diseases" are a number of pertinent facts, which deserve consideration in the evolution of a program for their control.

Dr. Max Bahr is authority for the statement that, "About twenty-five per cent of the cases in state hospitals are due to syphilis, and it costs the taxpayers of Indiana over a half million dollars annually to treat, care for, and maintain its syphilitic patients. This is an appalling amount, when you consider that syphilis is an acquired disease, and can be entirely prevented." Many reports have been made of surveys of inmates of penal institutions in which the percentage of syphilis was much higher than the estimated incidence in the civilian population. One such survey, made in Tennessee some years ago on a prison, and the area served by it, revealed that the prisoners had nearly four times as much syphilis as the civilian population.

Georgia reports that "Eight per cent of pregnant women attending prenatal clinics have syphilis. Also that when no treatment is given, about one-half of these pregnancies result in stillbirth or abortion, and probably one-half of the remainder die within the first year, while the others join the ranks of congenital syphilites in the community—defective, miserable children, who constitute the greatest tragedy of syphilis."

One eastern hospital, basing the report of findings at autopsies, found syphilitic changes in the heart in approximately sixty per cent of deaths due to heart disease. It has long been an erroneous opinion that venereal disease was more prevalent

in urban than rural communities. This has been shown to be fallacious by many surveys, one of the most interesting being a late one made by the county health officer of Worcester County, Maryland. This county has no large cities or towns, yet the number treated for syphilis in the county clinic was as high a percentage of the population as were being treated in the urban districts of Maryland.

Another phase of this problem to be considered is, what results may we expect from treatment? All authorities seem agreed that the disease is curable if adequate treatment is given in the early stages, but how many are adequately treated? Here reports are woefully lacking. In conversation with private practitioners none have been found—who have checked their records—that claim to be able to carry through treatment in more than ten per cent of the cases seen. The highest percentage found in public clinics is twenty-five per cent carried through to dismissal, in this instance being serologically negative for a period of sixteen months, combined with no clinical evidence of the disease. This higher percentage in favor of the clinic is indicative of but one thing in our opinion, namely, that the police power of the health office in compelling treatment represents the difference in the amount of treatment given. This police power is available and can be utilized in handling the recalcitrant private patient. In the control of venereal disease, no program can be effective that does not include the searching out of source of infection, the examination of contacts, and, since this can only be done by the power of the health officer, it necessitates the reporting of cases in some effective manner. Much has been told of the results obtained in the Scandinavian countries and the near eradication of syphilis, but attention must be directed to the fact that not much was accomplished until after stringent rules were enforced in regard to the reporting of cases.

Much stress has been placed on education of the public in regard to the venereal diseases. This is highly important to be sure, but first it might be well for us to "know the answers," for once the public begins to get the information on the disasters caused directly by these diseases, we will get plenty of questions as to why something is not being done to curb them. We need and should have a plan that will work and give results. Who is in a better position to formulate such a plan than our profession and health officers?

Another question is what constitutes adequate treatment? There still are patients being treated in Indiana who receive from *physicians* nothing more than oral medication for the various stages of syphilis. Should such treatment receive the stamp of approval of the profession? One of our friends insists that to achieve progress we must educate some of our own members and cites the following case as his reason for this contention: Recently while taking a history on a male patient he uncovered the information that the patient's

wife had had two stillbirths, one twenty and the other eighteen years ago. Sixteen years ago a daughter was born and is living and in apparently normal health. However, serological tests reveal positive findings in father, mother and daughter. Why was this not suspected before?

The new surgeon general of the United States Public Health Service, Dr. Thomas Parran, is waging a successful effort to get publicity on the pages of our newspapers and magazines. Will it not be best for us to "get in" on this and be ready to take our place in an intelligent, forceful manner and not wait to have a program handed to us, formulated by others? Our cooperation cannot but result in benefit to all, ourselves included. We may be sure, as usual, if the profession does not formulate its plan, it will be done for it.

In view of the above facts, we submit that the Indiana State Medical Association should have a plan for the control of venereal diseases. Such a plan must include the following points: (1) an effective reporting of cases; (2) search out source of infection and contacts for examination; (3) keep all patients under treatment until cured; (4) *keep the patient able to pay in the hands of the private physician*; (5) provide facilities for adequate treatment of the indigent patient at public expense; (6) be effective in rural as well as urban communities; (7) set a standard of adequate treatment and educate the minority in the profession to the point of using standard adequate treatment; and, (8) educate the laity to the seriousness of the venereal problem and the desirability of a strict enforcement of measures necessary in its control, special attention in this being given to judges and all law enforcement officers. We believe that the Indiana State Medical Association can evolve a plan satisfactory to all for the solution of this problem, and through its sponsorship carry it to a successful conclusion.

## CARE OF CRIPPLED CHILDREN UNDER SOCIAL SECURITY ACT

While there may be legitimate differences of opinion concerning many features of the Social Security legislation, that portion of it designed to benefit crippled children will find a ready and sympathetic approval from the medical profession. The ideals prompting this activity are of the highest order and in complete accord with our best traditions. We are all for it. However, the administrative machinery set up to achieve this ideal may work harm to the profession. Great care and foresight are needed in working out the details of any plan for fear that precedents of an undesirable nature may be established and create difficulties later on.

The Act, as written, limits state aid to those who are not able to pay for such service. Helping the handicapped child, unable personally or through its next of kin to help itself, will not create antagonisms within the profession. The general opinion

of the profession will be influenced in large measure by the standard adopted for determining the ability to pay. The question is "How or when is one unable to pay for needed medical service?" Manifestly, this will mean, in most instances, the ability of parents to pay. Nearly every one of us knows those who are unable to pay for medical service because of the excessive expense involved in automobile maintenance, etc. A realistic attitude on the part of the social worker contacting these cases will mean much in keeping the profession sweet.

It was with full realization of these possibilities that Dr. Oliver Greer accepted the responsibility for organizing the medical services needed. He has spent much time in visiting medical centers over the state where hospital facilities and trained orthopedists justified the belief that satisfactory service could be rendered. Without prejudice to other centers, three were selected, located at South Bend, Indianapolis and Evansville.

It is recognized that this limited selection will be received with disappointment in those other centers over the state where good orthopedic work is being done. It can be stated that, as this work develops, other centers will be designated, if the volume of cases warrants. It is recognized that transporting children to distant points for treatment has undesirable features, but may be justified during the early stages of organization.

Dr. Greer has selected an advisory committee of physicians to help him develop the medical and hospital service in such manner as, it is hoped, will meet the approval of the profession at large. Certain general principles appear that should guide the development of this plan:

First, the Act is to be administered solely for the benefit of crippled children. All other factors must remain secondary to this.

Second, the use of state-owned facilities should not be such as to call for bigger and better additions when, by so doing, it would put state-owned and controlled hospitals into competition with other hospitals and their medical staffs in competition with the rest of the profession.

Third, when certain type cases are taken from any community to another, the one community loses that professional experience while the other gains it. This is because the doctor becomes a better doctor in direct relation to his professional experience. In time, the difference becomes considerable and reacts to the detriment of those in the community who must depend upon their local profession. Orthopedic surgery requires special training and men with adequate training are not found on the staff of every hospital. It is conceded that certain disabilities, calling for specialized and expensive equipment in the hospital, would render duplication inadvisable. Such cases are not of the general run and should be sent any distance to the hospital provided for them. However, where good orthopedic work is being done, there is good reason why suitable cases, residing in territory tributary

to such centers, should not be sent to other and more distant points. As a profession, we must take the stand that the best interests of the crippled child demand that it be cared for at the nearest point where proper service can be rendered, even if this means, eventually, many more than three designated centers for treatment.

Dr. Greer's comments concerning the plan are published under the "Capitol Dome" column this month. Further details will be published in the October JOURNAL.

### EMERITUS PROFESSOR

After a service of forty-nine years, William Niles Wishard, M.D., has tendered his resignation as head of the Department of Urology in the Indiana University School of Medicine. Our first information regarding this came from an item in the local press and we were loathe to believe it, having come to regard Dr. Wishard as a permanent member of the faculty of our alma mater. So it was with deep regret, a regret shared by every member of the Indiana medical profession, that we have accepted the announcement after it has been personally confirmed. Thus ends a service as a medical teacher surpassed only by his service as a practitioner of the healing art.

Sixty-two years in active practice, plus a record of activities in his beloved Indiana State Medical Association, gives Dr. Wishard a record seldom equalled in medical annals. That he was unusually active, and continues many of these activities today, is evidenced by the record:

The first in Indiana to secure the erection of a modern city hospital (Indianapolis City Hospital, 1883);

Responsible for the organization of the first nurses training school in Indiana;

The first Indiana physician to make genito-urinary surgery an exclusive specialty (since 1887);

The first Indiana physician to remove a prostate (June, 1890);

The first in Indiana, and one of the first in the country, to be appointed to a chair exclusively devoted to his specialty (established in 1887 and held to this date);

Wrote the basic medical law of 1897, the first Indiana medical law of any consequence;

The first surgeon to visually apply the actual cautery to the prostate. This was done in 1890 and reported at the meeting of genito-urinary surgeons in September, 1891;

Generally credited with being the first to do a complete enucleation of the prostate through a median perineal opening, this in 1891;

The present much-liked transurethral section method of operating upon prostates was first used by Dr. Wishard many years ago and only recently again came into vogue;

Has practiced medicine in Indiana for sixty-two years, nearly equalling the record of his father,

William H. Wishard, who was in active practice in Indiana for sixty-five years.

In medical organizations, William Niles Wishard has been uncommonly active. He is a member of nine medical societies, including his county and state affiliations. In a recent letter to the writer, in speaking of vacations, he remarked that almost all such events were mixed with attendance upon medical society meetings or visits to hospitals. In 1898 he served as president of our Indiana State Medical Association, and he has served that organization in various other capacities, chief among which is his monumental work, the chairmanship of the Committee on Public Policy and Legislation, a post he held for twenty-four years, all prior to 1922. When he resigned from this position, he was named chairman of the Bureau of Publicity, a post he still holds. Dr. Wishard organized the work of the Bureau of Publicity, and it has come to be regarded as the most important committee in the Association. That it has been extremely well done is evidenced by the fact that many other state societies have made an intensive study of the plan in operation and have generously followed it in organizing similar work in their respective communities.

That a man of such attainments would certainly attract the attention of our lay educational institutions was to be expected, so it occasioned no surprise when Dr. Wishard was invited to this or that college commencement to receive an honorary degree. Such an event came into the life of Dr. Wishard five times, four such degrees being awarded by Indiana institutions and one by Wooster, in Ohio. The writer had the great pleasure of introducing Dr. Wishard at the 1933 commencement exercises of Hanover College where he was given the degree of Doctor of Science.

We should not forget the work of this man in the building up of the Indianapolis City Hospital where for some nine years he served as superintendent. Such an appointment, back in 1879, was quite some honor and meant for the recipient a task of no mean proportions. That he was successful in his undertaking goes without saying.

We might go much further in relating the varied activities of this man of indefatigable ability and talents, but the above will convey, in some small degree, an idea of the energy and industry of the man. For almost four decades we have known Dr. Wishard, first as a teacher, later as a highly esteemed friend. Possessed of a personality that instantly endears him, he has a highly developed sense of humor, an ability to express himself such as few men have, and it is little wonder that he has so many friends. Nor should one be surprised to learn that in so-called medical politics, Dr. William Niles Wishard never has had a competitor in his native state! On one or two occasions we have dabbled in the politics of our State Association; once in a while we believed we were "going places" and attempted some major program. When we were almost certain that it would go through,

we learned that Dr. Wishard was opposed to it, and try as we might, we never got to first base. As we recall it, several others have had the same experience! Later events usually proved that Dr. Wishard had the proper slant on the matter at hand.

Scion of a pioneer Hoosier doctor, he pioneered in his specialty, materially aiding in placing it on its present high plane. His love of his family and his church, together with his loyalty to his chosen profession, have endeared him in the hearts of Hoosierdom; we can recall no medical Indianian who is so generally and favorably known as Dr. Wishard.

While we regret that he is leaving the medical school, we know that his old chair will be in good hands, since his successor, Dr. H. O. Mertz, is a former student of Doctor Wishard and for years has been his associate. Dr. Wishard makes it plain that, although he is leaving his teaching post, he will continue to practice his specialty, and that is news that will be pleasing to his medical friends in the Central West. That he may carry on and on is their ardent desire.

We wish for William Niles Wishard a long continuance of his busy life, and we assure him now that he will ever be remembered as the Grand Old Man of Indiana Medicine.

## FOUNDATIONS AND FUNDS

Much has been written concerning the various foundations and funds that have been established by philanthropically minded folks. Some of these have attracted the serious attention of the medical profession because of the fact that their directors seemed obsessed with the notion that the best way to expend these incomes was to engage in a more or less complete change in the present medical set-up. However, for various reasons (not the least of which was the fact that the medical profession arose in mighty combat), many of these groups have receded from their original attitude and have sought other fields for their activities.

Now comes a proposed foundation—of, by, and for the medical profession, one which most certainly will attract the attention of our thinking members. If successfully carried out, and we see no reason why it should not ultimately attain huge success, it will be one of the most forward steps taken by the American medical profession in many decades.

All of these proposals to regiment our profession, to have governmental agencies take over the control of the greatest professional group in America, have aroused us; we have become economic experts, if you please. Thus it is not surprising that one of our state societies comes forth with a proposal for a foundation all our own.

We refer to the recent announcement of the Colorado State Medical Society<sup>1</sup> that the "Colo-

rado Medical Foundation Is Now a Fact." Harvey Sethman, competent lay secretary of this organization, details the proposed plans which show an amazing knowledge of present-day conditions and is patently the result of long and serious study by the committee in charge. The culmination came when, on July eighth, the Board of Trustees put their approval on the final draft. Mr. Sethman, in his description of the plan, sets forth the need for such a step in a most lucid, terse manner, and it is so thoroughly explanatory that we quote that part of the article:

"In the last few years the critical need of organized medicine for sounder financial background has become increasingly apparent. While some have contended, citing comparable organizations and even organizations of medical offshoots and cults as examples, that physicians should pay higher annual dues to support their protective societies, such would not provide the type of financial foundation needed. Medical organization could, and should, do more for its members. It should be able to provide more material for its scientific meetings, its clinic sessions, its postgraduate endeavors. It should be able to tide its entire membership over a difficult year or two such as those recently experienced, by possibly remitting all dues for a period. It should be able to endow worthwhile research in both curative and preventive medicine; it should not leave such things entirely to the lay foundation of the occasional philanthropist. It should be able to lend and sometimes donate funds to its own worthy members who have become incapacitated, or to their widows or children. It should lead, better than it now does, in genuine education of the public in matters pertaining to public health.

"These are but a few examples of major points considered in the original conception of the Colorado Medical Foundation."

Much attention is given to surrounding the financial set-up with every possible safeguard since it is well known that donors are chary about contributing to foundations and funds whose financial plans are not air tight. Perpetuity of the plan is also assured and the control, through a Board of Trustees, is so arranged that there always will be a majority of experienced men in control. The final draft of the plan is quite lengthy and we can only sketch what appear to be the salient points. The chief objects are described in the quoted statement from Secretary Sethman, though many others will suggest themselves to one who makes a study of the proposed plan.

From whence will come the donations for the foundation? While it is true that during the depression period there has been a decided lull in the donation of large amounts of money, the fact remains that there still is a sufficient amount of such funds available. Donors are to be found; they need only the assurance that their monies will be carefully safeguarded and properly expended. In many instances in the past, founders have established

<sup>1</sup> Colorado Medicine, August, 1936.

large incomes for specific purposes only to learn later that the particular needs no longer exist. We are told that many such organizations find difficulty in carrying out the original instructions of the donor.

In general, medicine is not a highly lucrative profession, though many of our members are very successful in the accumulation of money. It is from these that donations may well be expected. Just at this moment we are reminded of a fund, established at the death of an Indiana man some thirty years ago, a fund which has now reached sizable proportions and which has no definite object save that it must be used for educational purposes. Also within our own state, and within the memory of us all, there have been numerous donations of rather large amounts of money to be used for medical purposes. Dr. Robert W. Long contributed sufficient funds to establish the hospital that now bears his name, and on the same campus is another memorial hospital established by an old Hoosier family.

What we want to say is this: The Colorado idea is sound; it supplies a solution to many of the problems that have been bothering us. What Colorado is doing Indiana can do, and most of the other states, too, for that matter. We repeat that we believe the plan is sound and entirely feasible. There can be no doubt about its merit. There is much food for thought in the proposal and we commend it to our members.

## THE 1937 LEGISLATURE

Next January we will have with us the biennial session of the Indiana legislature and with its coming it seems we have something before us. Indiana medicine has fared pretty well at the hands of the legislature in recent years, not that we have asked for much legislation but that we have been most fortunate in having few evils thrust upon us by that body. Much of this is, of course, to our credit, since this result has been primarily due to a good organization, plus the fact that we have for years past had an active, efficient legislative committee. Probably the most effective work in recent years was that during the recent special session when our committee, after a long, vigorous fight came out of the fray practically unscathed.

While we render all credit to our Association committee, the fact remains that a single committee can accomplish little if it does not have active and united support, and that support must come from our membership, through the county medical society. We are not complaining of any lack of concerted action; merely do we wish again to call your attention to the fact that the fight is once more before us and it continues to be our duty to render every possible aid.

Though the fall election is some two months away we deem it advisable to bring this to your attention now. October is just about the busiest of

the calendar months for Indiana doctors, since it is in that month that they gather for their annual convention. Convention time is no time for that sort of politics, since it is the season when we foregather for a session of scientific enlightenment, plus a few short hours devoted to social and pleasurable pursuits. So it is that we again address you on the importance of having your armor in the best of condition and even now take your role in the campaign for common sense justice to the greatest of the professions.

We are rather enthusiastic about the outlook. Fool legislation will be proposed—such things crop up in every legislature in every state—but we do believe that with all our propaganda we have convinced the thinking people of Indiana that the less tinkering there is done with the profession of medicine, the better it will be for the public weal.

In a very few years we have ridden ourselves of a group that has recently been called "The Four Horsemen"; two of this group were from eastern states, one was from Illinois and, sad to say, one was from Indiana. The eastern men have had their ears properly pinned back, as has the gentleman from Illinois, and the Hoosier is no longer with us—he has left his Indiana University post to go elsewhere. With the passing of this group the profession finds itself well rid of four men who were more than a menace. They were so officially situated that their utterances sounded somewhat authentic; their sonorous voices and their "prophetic" announcements were heard all over the land and many were led to believe that their opinions were gospel of the first water. Not a few of our profession were greatly alarmed when this quartet got into action, and it was commonly believed that death and destruction were imminent.

Now that much of this alarm has subsided (and the Hoosier medical profession played no small part in killing it off) is the time for more concerted action. This gaunt specter of interference with the personal and professional affairs of a highly educated group, such as is the medical profession, must be utterly wiped out, and it can be wiped out if we but continue to present a solid front.

To return to the subject, the 1937 legislature, *what has your county society done to insure such an end?* This is not an Association question, it no longer is a county medical society question, it resolves itself into a personal question—for if your society is not active, right now, then it is *your* duty to know the reason why. Headquarters has long since written your local group, urging the appointment of a county society legislative committee; this committee has been asked to do many things, chief of which is to send in a report on all legislative candidates. If this request has been properly complied with, all well and good, since it means that our Association committee has first hand information of what to expect, no matter whether the elephant or the rooster is to fly from

the capitol dome for the next four years.

Only the other day we were given a preview of a legislative survey made in one of our larger counties and you may take it from us that this committee really made a canvass. We are not exactly certain, but our memory is that the report is so detailed that the color of the eyes and the hair of each candidate is given. There is no way of knowing who will be elected in this county but we do know that the members of this particular society will have an intelligent and accurate picture of all the candidates.

If your county society is functioning properly in this regard, we have but one more suggestion to offer and that is that you *vote for the medical profession, rather than for the candidate.* We believe that statement needs no further comment.

## PIONEER MEDICINE

The plans of the Woman's Auxiliary of the Indiana State Medical Association to see that fitting honors are rendered to pioneers in Indiana medicine are of general public interest. The state is interested in seeing that it receives proper credit for the contributions of its physicians—and their patients—to the advancement of medical science. This contribution is an important part of American medical history and includes some instances of world renown. The people of today whose pride in their state is a matter of continuous interest will find, according to evidence already at hand, that in the work of pioneer medical men they have numerous reasons for improving the national renown of Indiana.

Remarkable advances in medicine and surgery during the last fifty years, which have added several years to the life expectancy of the people, tend to obscure the bold and ingenious work of the pioneers. Operations which they approached without precedent to guide them, or even anesthetics to spare them the perturbation inseparable from the pain of their patients, are now looked upon as commonplace routine in surgery. A proper appreciation of the pioneering can be had only by a survey of medical history as known at the time, or comparisons with some of the discoveries now in the making under highly specialized laboratory and hospital conditions of which the forerunners of the present school never dreamed.

The chief incentive to a complete survey of Indiana's early medical achievements, and suitable recognition of those who participated in them, is the creation of a tradition of public appreciation. This affords some satisfaction to those taking part in the immediate project. But its main value is in the ambition that it arouses in the young. The youth who is stimulated by the records of these achievements, and the memorials symbolizing

the people's appreciation, to direct his attention to this field is a valuable community asset. He always gains something and gives something in the struggle for distinction, and he may thrust back again the frontiers of medical knowledge. The state can profit well by cooperating in the medical community's great and worthy project.—Indianapolis News, July 14, 1936.

## EDITORIAL NOTES

We are a bit reluctant to bring up the subject again, since the House of Delegates last year summarily dismissed a similar suggestion, but it does seem to us that members of the Executive Committee who reside outside of Indianapolis should have some recompense for this service; the least we could do is to pay their actual traveling expenses. Indiana physicians are notoriously generous with their time and talents when it comes to furthering the interests of their profession, but in this instance it seems most unfair to expect these men to render such service at an actual cost to themselves.

The importance of diagnosis of traumatic injuries of intra-abdominal viscera is stressed by Dr. J. B. Farley in *Colorado Medicine* for August. With the great increase in traffic accidents, this subject becomes one of major importance. Farley properly insists that the element of time in such cases is very crucial, and that "watchful waiting" has little place in the matter of such diagnoses. He reports that prior to 1890 the mortality in such cases was about 90 per cent, and that in recent years this rate has dropped to about 50 per cent. Dean Lewis reports a group of 140 such cases in which the mortality was but 30 per cent.

Rather frequently we have commented on the evils of using dinitrophenol as a reducing drug, and have directed attention to some of its unpleasant results, particularly the tendency to promote lens opacities. The subject is being discussed frequently, and the medical literature is replete with case reports of the evils resulting from the use of this drug. Recently there have been reports of the destruction of other eye tissues, notably a degeneration of the iris which becomes necrotic. Our druggist friends continue to hand out proprietary preparations under various names, containing this

same drug as the active ingredient. More than that, it seems that members of our own profession continue to prescribe dinitrophenol. Yes, it will reduce weight—but at what cost to the patient!

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Bethea, of New Orleans, recently discussed the use of whiskey in medicinal preparations, arriving at the interesting information that in each 10,000 prescriptions written in 1885, 244.5 called for whiskey; in 1909 this figure had dropped to 38.7, and in 1933 it was further reduced to 1.8. This information brought the following remark from an acquaintance: "That is readily understood. After fifteen years of prohibition, physicians have forgotten the value of alcoholics as medicinal agents." We offer no further comment.

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The heat and drought have given lovers of garden flowers a hard time of it this summer. From early childhood we have wanted to "grow things" and have been more than ordinarily successful in gratifying that desire. In spite of unfavorable conditions this summer, we managed to get together a very attractive garden, then went away on a two weeks' vacation, and in that time much damage was done. In about three weeks this had been rather well repaired, then came another enforced absence of a few days, and again Old Sol got in his work; but we are at it again, and results are evident. Of all professional groups, we believe that physicians should be the leaders in garden growing. We know of no other form of exercise that uses so many muscles, and it takes one into the open. We maintain that one who gets right down and digs into Mother Earth is engaging in one of the most healthful pursuits.

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We sometimes wonder if the rank and file of the membership is aware of the enormous amount of work done by some of our official family, particularly the Executive Committee. We have just concluded a study of their annual report and are impressed with the importance of this group. By invitation we have occasionally attended some of their sessions and know that it is a hard working group. Their sessions might well be termed all-day affairs, since their monthly meetings are seldom finished in less than five to eight hours. The agenda prepared for these meetings covers just about everything pertaining to Indiana medicine. These meetings are so well attended that it is a rare occasion when a single member is missing. We urge every reader of THE JOURNAL to give special attention to this report, since it is much more than a cross section of what has been going on in medical Indiana during the past year.

Returning from Detroit a few days ago, we chanced upon a group of highway signs calling attention to the fact that a few miles further down the road one would find a place where real rest and refreshment might be had. Driving into the side road, and wending our way through a little forest of native trees, we came upon a delightful little spot, bearing every evidence of being able to provide good food, and we were not disappointed. After enjoying the food, we looked about the place and discovered a beautiful, clear stream running through the hilly grounds. Coming upon this after a long, hot, dusty drive, it was indeed a pleasant sight. A little later, after walking less than half a city block along the course of the stream, we saw an open sewer emptying into the water that only a moment before had so delighted us. The owners of the establishment, apparently having no regard for such natural beauties, had caused a considerable amount of raw sewage to be discharged into the little stream. Such things can and should be prevented by our health departments.

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The Division of Public Health continues its aggressive campaign against stream and lake pollution, not forgetting the very important problem of domestic water supply. Announcement is made in a recent bulletin regarding the problem at hand in the town of Lowell, a thriving community in southern Lake County. For many years Lowell visitors have complained regarding the taste of the city water, which was ascribed to the sulphur content. The Division of Public Health has been making a survey of the situation and has recommended a new source of supply for that community, due to the fact that analyses of the city water show large amounts of fluorine; the comment in the *Bulletin* is of sufficient interest to warrant reprinting it here:

*Lowell Public Water Supply:* Additional investigations of the private water supplies in and about Lowell have been made in an effort to discover a fluorine-free water. These investigations indicate that it is doubtful if a fluorine-free water can be obtained in the immediate vicinity of this municipality.

Dental groups state that an individual afflicted with mottled enamel will spend approximately one thousand dollars on his teeth before reaching the age of thirty years. At this age the individual will probably lose all of his teeth and be forced to resort to artificial substitutes. Aside from these costs, the social aspect of the problem cannot be ignored. People afflicted by mottled enamel find it difficult to obtain high-type positions.

The above figures depict the magnitude of the fluoride problem and demonstrate conclusively that even large expenditures for a satisfactory water supply will prove to be a good investment.

## PRESIDENT'S PAGE

### MEDICAL FRIENDS AND MEDICAL MEETINGS

A man should keep his friendships glowing and his knowledge continuously refreshed.

The physician is from the very nature of the patient relationship an individualist in his work, to a degree probably greater than the member of any other profession. In some instances, individual personalities tend to bring him into almost complete professional isolation. Physicians in some communities have been known to be so unfriendly as to make any kind of amicable relations impossible. Happily, this period in medicine is passing and physicians generally recognize the desirability of professional friendship and cooperation. Medical society meetings, both scientific and social, have aided greatly in breaking down barriers and establishing among medical men friendliness and understanding in meeting mutual problems. Geographic separation is to be noted—more than one third of the members of the Indiana State Medical Association live in population groups of less than five thousand and approximately one-quarter practice in areas having not to exceed six physicians. The importance of meetings for state-wide attendance must be recognized.

The Indiana State Medical Association holds three meetings each year for the entire membership. The first of the year—The Secretaries' Conference. These meetings have to do primarily with organization matters and methods, and social and economic trends. On these programs, outstanding men present special studies, and officers and committeemen discuss local problems. A dinner and evening address on a medical or social subject follows. The helpfulness of these meetings should be emphasized.

Later in the Spring—The Graduate Study Meeting. These meetings are planned for concentrative study throughout two days and evenings. A limited number of medical or surgical conditions of general interest are presented in didactic lectures and clinics by nationally known men, for the purpose of refreshing and bringing down to date the medical knowledge on these subjects. The members recognize the great importance of these meetings. There are no social features in The Graduate Study meetings.

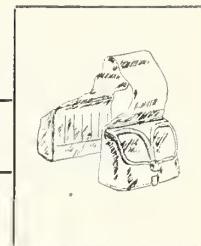
The summation of the activities of the State Association comes in its Annual Meeting in the Autumn. These meetings have been noted for the quality of their scientific presentations, and nationally and internationally known authorities have appeared upon the programs. With increasing attendance and specialization of interests, it has been necessary to subdivide the work into sections, with a resulting increase in the number of subjects presented and the number of speakers appearing upon

the programs. Each year much thought is given to the selection of subjects so that the programs may cover a larger field of general interest and not offer too frequent repetitions. The Annual Meeting combines many features—organization activities—session of the House of Delegates, annual reports, legislative activities, election of officers. Scientific presentations—program, scientific exhibits. Commercial—exhibits. Provisions for entertainment and facilities for social enjoyment include golf, skeet shooting, sightseeing to local points of interest, smoker with entertainment, and class, fraternity and special group reunions. Sightseeing trips, bridge, teas, dinner and other entertainment for the ladies. The social program culminates in the interesting and colorful annual banquet of the Association. Dr. J. H. J. Upham, president-elect of the American Medical Association, and Mr. G. J. Laing, of the University of Chicago, will this year be guest speakers. The banquet will be served in one of the dining halls of the University of Notre Dame and there will be ample seating capacity and service for all who wish to attend. In summary, the State Association combines the legislative, scientific, social, and commercial interests of its members in a large annual meeting which the entire membership is urged to attend.

Much of the great success of these meetings is probably due to the basic desire for the companionship of those with whom we have common interests. Many medical successes are attributable to the inspiration gained from discussion of subjects of mutual study. There is nothing comparable to the pleasure of meeting old friends, but that one who does not also make new friends in time finds himself alone. Life is a correlation of old and new. New friends and old friends, new facts to enlarge upon old knowledge, new interests to modify passing modes, new stimuli to waning enthusiasm, make secure the art of living both worthily and happily. Gracian advised, "Know how to arrange your life with discretion, and not as accident may determine, but with foresight, and choice. It is a toilsome affair, without recreation, like a long journey without inns; variety in mental equipment makes it happier."

The South Bend meeting will be an outstanding one. Your friends will be there, and they will receive more in benefit and pleasure if you are there too. Write to the one who might not come and whom you wish to see. Dr. Alfred E. Ellison, chairman of the Housing Committee, will send a special invitation, if you wish, informing him that you wish him to come.

*R. L. Denserich*



## Indiana Medicine in Retrospect

L. G. ZERFAS, M.D.  
Historian, Indiana State Medical Association

### SOCIETY OF THE SECOND MEDICAL DISTRICT

Recently the William Henry Smith Memorial Library in Indianapolis obtained a copy of the first Constitution and Bye-Laws adopted by the Second Medical District of Indiana on July 28, 29, and December 9, 1817. The library is to be highly commended for securing and preserving this important early Indiana publication.

The first medical law adopted by the state provided for the formation of three medical districts to be organized at approximately the same time. The "Constitution and Bye-Laws" here reproduced is the only one available but doubtless those of the First and Third districts closely paralleled this of the Second. The various articles and sections are largely self-explanatory. It will be observed that each district society served as a licensing board; in addition it regulated and set the standards of practice for its members. In fact the district society was a constituted portion of the state government and closely allied with the legislative and judiciary departments. Each member was required to report on the general state of health and natural conditions in his community which information provided a means of ascertaining the state of the public health. The general interest and recognition of literary attainments by election of honorary members and the offer of prizes to the members for essays were evidences of the high character and intentions of the founders of this society.

**CONSTITUTION AND BYE-LAWS OF THE MEDICAL SOCIETY OF THE SECOND MEDICAL DISTRICT OF INDIANA, JEFFERSONVILLE: PRINTED AT THE OFFICE OF THE INDIANIAN BY I. COX. 1820.**

#### CONSTITUTION

**ARTICLE I.** This Society shall be known by the name and style of the "Board of Physicians of the Second Medical District of Indiana."

**ARTICLE II.** The first election of officers shall take place immediately after the organization of this Society, and shall hold their offices until the first annual meeting.

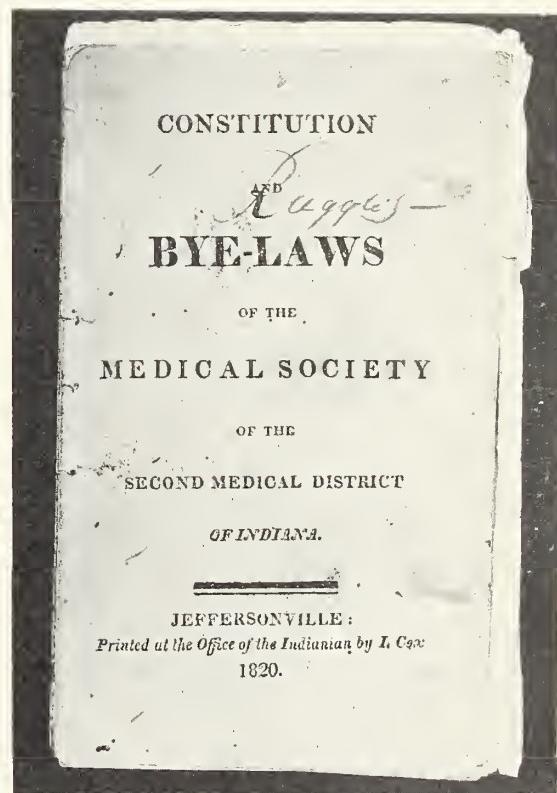
**ARTICLE III.** The officers of this Society shall be elected by ballot at each annual meeting, and shall hold their offices until a new election shall take place.

**ARTICLE IV.** The person having the greatest number of votes for any office, shall be considered as duly elected.

**ARTICLE V.** The officers of the society shall consist of a President, Vice-President, Secretary,

Treasurer and five Censors. The President and Vice-President shall ex-officio, constitute two of the Board of Censors.

**ARTICLE VI.** It shall be the duty of the President to preside at each meeting of the society—to sign all licences granted by the society—to call an extra meeting of the society at the request of any two of the members, and to fulfill any other duties which the Bye-Laws may require of him.



**ARTICLE VII.** It shall be the duty of the Secretary to keep a fair record of all the proceedings of the society in a book provided, at the expence of the society.

**ARTICLE VIII.** It shall be the duty of the Treasurer, to keep an exact account of all the money received and expended, and make report at each annual meeting.

**ARTICLE IX.** In the absence of the President, the Vice-President shall fulfill the duties of the President, and in the absence of the President and

Vice-President, the oldest Censor present shall fulfill the duties of President.

ARTICLE X. Five members of the society shall at any annual meeting constitute a quorum for the transaction of business, and three at a semi-annual meeting, provided in each meeting the President, Vice-President, or one of the Censors shall constitute one of the number.

ARTICLE XI. There shall be an annual meeting of the society on the Tuesday following the second Monday in December, at 9 o'clock A. M. at Corydon, so long as it shall remain the seat of government for the state.

ARTICLE XII. A semi annual meeting shall also be held at such time and place as shall also be agreed on at the annual meeting.

ARTICLE XIII. No Physician shall be admitted a member of the society who shall not sustain a fair moral character.

ARTICLE XIV. Any member may be suspended or expelled for grossly immoral or disorderly conduct, by a vote of two thirds of the members present.

ARTICLE XV. A committee of correspondence shall be chosen at each annual meeting, consisting of three members; whose duty it shall be, to confer with other societies or individuals (sic) on subjects connected with the profession, and to communicate the result of their correspondence at each meeting of the society.

ART. 16th. Each member of the society shall sign the Constitution of the society.

ART. 17th. This Constitution may be amended by a vote of two thirds of the members present—the motion for amendment having been made and recorded at the previous meeting.

Passed July 28, 1817.

#### BYE-LAWS.

ARTICLE 1st. It shall be the duty of the President to deliver any Essay or Dissertation before the Society, at the opening of the next annual meeting succeeding his election.

ART. 2d. It shall be the duty of the President to sign all petitions preferred to the Legislature.

ART. 3d. It shall be the duty of the Secretary to countersign all licenses signed by the President.

ART. 4th. It shall be the duty of the Censors of this District to meet at the annual and semi-annual meetings; and at such other times and places as shall be deemed expedient, to examine all applicants, and to recommend all those deemed worthy to the President for license, and to grant permissions to practice in the intervals of the stated meetings of the society aforesaid.

ART. 5th. A committee of three shall be appointed at each annual meeting, to offer such prizes in medals or medical books, for essays (sic) or dissertations on subjects connected with the profession; in such mode and of such value as they may think expedient.

ART. 6th. At no stated or special meeting shall any ardent spirits be introduced.

ART. 7th. Each member shall pay into the Treasury the sum of five dollars on his admission.

ART. 8th. The two oldest Censors shall be a committee to settle with the Treasurer, and the seniority of Censors shall be determined by priority of election.

ART. 9th. No money shall be drawn from the Treasury, except by a vote of the society.

Passed July 29, 1817.

B. Bradley, Sec'y.

#### BYE-LAWS PASSED AT THE ANNUAL MEETING OF THE SOCIETY ON THE 9TH DEC. 1817:

SEC. 1st. At every meeting of the society, the following order of business shall be adopted: After the President has declared the society constituted, the names of the members and also the minutes of the last meeting shall be read by the Secretary. Miscellaneous business shall then be attended to.

SEC. 2d. Every member shall observe order and decorum at all meetings of the society, and shall pay proper respect to the fellow members and to the President and other officers of the society.

SEC. 3d. The President may give leave of absence to any member at his discretion.

SEC. 4th. It shall be the duty of every member of the society to present all proper information respecting the geology and topography of the country in which he resides, together with an historical account of the diseases which prevail at any season of the year; and shall communicate all such information in his power which may contribute to the public good or advance the knowledge of the healing art.

SEC. 5th. All ex-members of the society shall be honorary members thereof, and the Governor and Lieutenant Governor of the state and the judges of the Supreme court for the time being, shall be ex-officio members of this society; and all persons of distinguished literary talents, who may be proposed as honorary members of this society, must be nominated at the anniversary meeting, and shall not be elected until the next succeeding anniversary meeting which shall be done by ballot; but there shall not be more than two honorary members elected in any one year.

SEC. 6th. All honorary members shall have all the power of ordinary members, except they shall not vote on any question, nor be eligible to any office in the society, and a majority of votes shall admit an honorary member.

SEC. 7th. All pretenders to nostrums and secrets in composition, when requested by any member of the society shall reveal to the society, the true and real composition, or nostrum made use of by them, upon the penalty of expulsion, and it shall be deemed derogatory to the dignity of the members of this society, to hold any correspondence, or give counsel with such person after expulsion.

SEC. 8th. By a representation of five members to the society, of their being dissatisfied relative

(Continued on Page 510)



## CRIPPLED CHILDREN CARE

August 19, 1936.

Executive Committee, -

Indiana State Medical Association.

Gentlemen:

In regard to your question concerning the Indiana State Plan for Services to Crippled Children, permit me to say that, although the plan was submitted to Washington, August 9, no official approval of it has as yet been received. However, I am of the opinion that the plan, as to its general aspects, will be approved, and feel that information as to its content should be given the medical profession through THE JOURNAL of the Indiana State Medical Association, rather than to have them read of it in the general press.

The tentative plan, as submitted, provides for the utilization of two hospital centers, for the present, other than the Riley Hospital. These centers chosen will be South Bend and Evansville, respectively, due to their geographical location, available orthopedists and hospital facilities. Work in these cities will be done on the same basis as orthopedic work is now done at the Riley Hospital, that is to say, recognized orthopedists will care for crippled children, without remuneration. The procedure concerning admission of indigent, crippled children to the Riley Hospital will be identical with that now in effect. This calls for commitment by a court of competent jurisdiction, or the child may be placed therein by application of the official state agency of the Department of Public Welfare. Placement of a child in Evansville or South Bend hospitals will be effected by commitment by the routine legal procedure now in effect, or by application to such hospital by the official state agency. In no instance will the Department of Public Welfare arrange for the placement of a child in one of these institutions unless the county has exhausted its own resources. When such condition exists, the Department of Public Welfare may place a crippled child in any of these institutions, and assume full or partial responsibility for payment of cost incurred, from Federal funds specifically allotted for that purpose. The cost of caring for indigent cripples is a charge by law upon the county in which a child may have his legal settlement.

Heretofore, Indiana has made no concerted effort to locate its indigent, crippled children. It will be my purpose to locate such crippled children through confidential reports from the State Department of Public Instruction and Medical sources. When these children have been located, medical-social workers of the highest type will go into the various

Councilor Districts of the state and endeavor to secure complete medical-social histories on all crippled children residing therein. Such information will be obtained by cooperating closely with the physicians in that particular community. When each case has been completely worked up, an orthopedic consultation service will be afforded in some conveniently located portion of the Councilor District, to which indigent, crippled children will be invited.

Insofar as is possible this service will be conducted by a reputable orthopedist or physician residing in the Councilor District, selected by the Technical Sub-Committee of the General Advisory Committee, which is composed of members of the Indiana State Medical Association. This committee consists of:

Dr. R. L. Sensenich, president of Indiana State Medical Association, South Bend, Indiana.

Dr. I. C. Barelay, general practitioner, councilor, Indiana State Medical Association, Evansville, Indiana.

Dr. C. J. Clark, cardiologist, councilor, Indiana State Medical Association, Indianapolis, Indiana.

Dr. F. S. Crockett, urologist, Lafayette, Indiana.

Dr. John H. Green, pediatrician, North Vernon, Indiana.

Dr. Leonard Ensminger, orthopedic surgeon, Indianapolis, Indiana.

Dr. Louis Belden, general surgeon, Indianapolis, Indiana.

These men have been accepted and approved, as a technical, advisory committee, by the Department of Public Welfare of the State of Indiana. A quorum of individuals composing this committee was held on July 31 and elsewhere in the current issue of THE JOURNAL is an opinion resulting from a discussion by the members of this committee.

The orthopedist in charge of such service in the Councilor District will make diagnosis, prognosis and give probable estimate of time that such child may be hospitalized. These men will be paid a nominal sum for their services. Orthopedic nurses will be assigned to the various hospital districts, who will work in the field to insure the carrying out of the orders of the attending surgeon, whether the crippled child has been permanently or temporarily dismissed from the hospital.

An appropriation is included within this plan which will make it possible for many more cases of spastic paralysis within the state to be cared for than have heretofore had the advantage of intensive treatment.

It will be the policy of this department not to interfere in the patient-physician relationship. Federal assistance to crippled children will be extended to indigent patients, as has before been stated, only when a county has exhausted its own resources, as determined by the department in accordance with the state plan and the requirements of the Federal government. Counties will still normally

bear the cost of caring for their own indigent cripples, as provided by law. The amount of Federal funds to be allotted for this purpose is relatively small and its use must be confined to emergency situations. There are no state funds that may be used for medical care.

I trust that this information, although not official, will be informative to the members of the Indiana State Medical Association. Our effort will be to assist in an extension of services to crippled children in areas predominantly rural, and in areas suffering from severe economic distress, as required by the Federal Social Security Act. To further this objective, the Indiana State Plan has been made to conform along lines suggested by the Children's Bureau, and at the same time to the Indiana State Laws.

The state plan will in no wise interfere with the effort of any physician in any community to develop his practice along any line he may see fit. It is my earnest hope that I may have prepared an outline of the official plan in time for the next publication of THE JOURNAL.

Sincerely yours,

OLIVER W. GREER, M.D.,  
Director, Services to  
Crippled Children.

#### PUBLIC HEALTH NURSES

Regulations for appointment and maintenance of public health nurses by county commissioners and city councils under the social security program have been determined by the state division of public health which is given authority to set qualifications by the Act.

The regulations are:

1. Professional histories and references of applicants must be filed with the Bureau of Public Health Nursing, and appointments cannot be made until the applicant is approved by the health division.
2. Approval shall be given for only one year at a time.
3. State public health nursing consultants will make at least two advisory visits a year to each public health nurse to make recommendations.
4. The program, policies and procedures of local nursing services must be satisfactory to the state health division.
5. Public health nurses must make daily reports of their work, and send monthly reports, both statistical and narrative, to the state Bureau of Public Health Nursing by the tenth of each month.

Minimum requirements for public health nurses were:

Vigorous health, high ideals, reliance, ability to organize, and ability to get on with other people; high school education or its equivalent and license to practice nursing.

For nurses working alone: high school education or its equivalent; nurse's license; six weeks university instruction and a year's experience under qualified supervision, or one year's approved university course in public health nursing, or two years' experience under qualified supervision.

For a nurse supervisor: high school education or its equivalent; license to practice nursing; at least one year's experience in public health nursing and one year's public health nursing course in a university which meets accepted standards.

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#### PUBLIC WELFARE

Despite the new Indiana program for public welfare, township trustees still are responsible for temporary medical care of needy persons, according to an unofficial opinion issued by Philip Lutz, Jr., attorney general.

The 1935 public welfare act provides that no aged person who is receiving a grant under the law—old age pension—shall be eligible for any other public relief from the state or any municipal corporation, except for temporary medical and surgical assistance and necessary hospital expenses.

The township trustee, Mr. Lutz pointed out, is required to provide prompt medical and surgical assistance, see that medical supplies, special diets or nursing prescribed by the physician for the poor are properly furnished.

"Temporary" was defined as "Disability which is not permanent is to last for a limited time only as distinguished from disability which is perpetual or indefinite in its duration."

"It would seem, therefore, that the temporary medical and surgical assistance mentioned in Section 33 of the Welfare Act is such assistance of that character as can be given by the township trustee under the poor relief laws so long as the recipient can be treated in his own home or in a hospital and can be taken care of without permanent institutional care, and is given under the poor relief laws which make it the duty of the overseer of the poor to 'promptly provide medical and surgical attendance for all of the poor in his township who are not provided for in public institutions,'" the attorney general wrote. "When this condition becomes such that the patient requires continued care in an institution and cannot be taken care of in his home or in a hospital, then it may be said to be permanent."

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#### PRIVATE ORGANIZATIONS CAN HELP COUNTY ORGANIZATIONS

Philip Lutz, Jr., attorney general, has issued an opinion setting out that private health organizations such as local tuberculosis associations may help finance health work in the various counties. The opinion was written to W. H. Grazier, assistant director of the state division of public health,

*(Continued on Page 511)*

## DIPHTHERIA DEATHS JULY, 1936

During the month of July there were three diphtheria deaths, ages 9 months, 2 years, and 4 years. Two of the deaths were from laryngeal diphtheria; the other one was a case of post diphtherial paralysis involving the heart.

The counties were Wayne, Lawrence, and Marion. This is the first month that Wayne County has been in the list of counties showing deaths. Marion County has now had 10; Lawrence, 3.

We wish to call to the attention of the profession the fact that diphtheria deaths always bound upward in the latter part of September and reach high proportions in the three following months. Now is the very latest time that one can give immunization and be ahead of the fall menace in this strictly preventable disease.

The distribution of the deaths by counties for the month of July and for the period of the year is given in the table below:

County	No. for month	No. for year
	July, 1936	1936
Allen	0	3
Benton	0	1
Brown	0	3
Cass	0	1
Clark	0	1
Delaware	0	1
Dubois	0	1
Elkhart	0	2
Grant	0	1
Greene	0	2
Howard	0	4
Jennings	0	1
Knox	0	1
Lake	0	4
Lawrence	1	3
Madison	0	4
Marion	1	10
Martin	0	1
Monroe	0	1
Montgomery	0	3
Owen	0	1
Parke	0	2
Pike	0	1
Ripley	0	1
Saint Joseph	0	3
Tippecanoe	0	4
Vanderburgh	0	3
Vigo	0	1
Warren	0	1
Washington	0	1
Wayne	1	1
Total	3	67

## SECRETARIES' COLUMN

On to South Bend October 6, 7, 8! Did you see the program? Well, it does not tell all the story. There are several treats in store for you that I didn't see mentioned in THE JOURNAL.

Have you sent in the names of your delegates? Have you issued them the proper credentials? If you have not done so, get busy and do it now.

Have you arranged for a meeting this fall to consider maternal welfare and the state social security act? I believe every doctor should be familiar with the social security program. These subjects will make interesting talk.

Have you any doctor in your county who does not belong to your society and who is eligible? If you have, get him to join. Medical organization needs a full membership.

The following is a good motto for medical society program committees: "The progress of the members of our medical society depends as much if not more on the correct understanding and application of established medical knowledge than on promised additions."

It soon will be school time. Have you planned any preventive medicine measures in your county? I think it is good policy for the county medical society to have plans so that when we are asked to do something, they can say we are ready. Get the argument over first.

Chairman.

### INDIANA DIVISION OF PUBLIC HEALTH BUREAU OF COMMUNICABLE DISEASES

#### Monthly Report, July, 1936

Diseases	July,	June,	May,	July,	July,
	1936	1936	1936	1935	1934
Tuberculosis	301	128	181	177	168
Chickenpox	24	67	132	24	18
Measles	24	40	84	89	212
Scarlet Fever	127	222	525	90	103
Smallpox	2	15	8	7	2
Typhoid Fever	20	16	6	28	53
Whooping Cough	115	119	109	146	225
Diphtheria	41	27	33	41	33
Influenza	48	33	123	48	21
Pneumonia	76	65	104	33	10
Mumps	26	82	314	33	5
Poliomyelitis	4	0	2	2	2
Meningitis	6	6	24	7	0
Undulant Fever	1	2	0	0	1
Encephalitis	1	0	0	1	0
Malaria	1	0	0	8	4

## DEATHS

FLOYD H. HOUSE, M.D., of Westville, died August third, aged forty-eight years. Dr. House had practiced in Westville since 1926. He was a member of the LaPorte County Medical Society, the Indiana State Medical Association and a Fellow of the American Medical Association. He graduated from Baylor University College of Medicine, Dallas, Texas, in 1921.

CHARLES T. BRONAUGH, M.D., of New Ross, died July twenty-third, aged eighty-two years. Dr. Bronaugh graduated from the Medical College of Indiana, Indianapolis, in 1884. He was a member of the Montgomery County Medical Society, the Indiana State Medical Association and the American Medical Association.

WILLIAM A. ESHELMAN, M.D., recently of Anderson, died suddenly July seventeenth, at Weston, West Virginia, while on a business trip. Dr. Eshelman practiced in Anderson for many years, and lately has been located in Columbus, Ohio.

AUSTIN A. SWOPE, M.D., of Crawfordsville, died July seventeenth, aged sixty-eight years. Dr. Swope had practiced in Crawfordsville for thirty-six years. He graduated from the Medical College of Indiana, Indianapolis, in 1898, and was a member of the Montgomery County Medical Society, the Indiana State Medical Association, and the American Medical Association.

RAYMOND H. STENGER, M.D., retired physician of Marion, died July ninth, aged fifty-three years. Dr. Stenger was a former member of the staff of the U. S. Veterans' Hospital in Marion, and he served overseas with the medical corps during the World War. He was a graduate of Indiana Medical College, School of Medicine of Purdue University, in 1907.

FRANK L. TRUITT, M.D., of Indianapolis, died August thirteenth, aged fifty-five years. Dr. Truitt was medical director and secretary of the Reserve Loan Life Insurance Company in Indianapolis. He graduated from the Medical College of Indiana, Indianapolis, in 1904, and was a member of the Marion County Medical Society, the Indiana State Medical Association, and the American Medical Association.

## HOOSIER NOTES

Dr. Neal E. Baxter has located in Bloomington where he will conduct a general practice at the Woolery Clinic.

Dr. Karl C. Eberly, of Fort Wayne, spoke on "Health Problems in Fort Wayne" before the members of the Kiwanis Club, August fourth.

Dr. and Mrs. Paul Arbogast have moved to Vincennes where Dr. Arbogast has opened an office for the general practice of medicine.

Dr. Maurice Rothberg has opened an office in the Wayne Pharmacal Building, Fort Wayne, for the special practice of ophthalmology and otolaryngology.

Dr. J. M. Jackson and his son, Dr. J. K. Jackson, of Aurora, now are located in their new offices at 223 Mechanic Street in Aurora.

The Kokomo Clinic Building has been sold to Dr. H. M. Rhorer, of Kokomo. The Kokomo Clinic has passed out of existence, and Dr. Rhorer expects to utilize the building for his own work. Physicians who had formed the Kokomo Clinic have arranged to establish separate offices and engage in their practices individually.

Dr. Richard Nelson and Miss Vera Prior, of Hammond, were married in Hammond, July twenty-fifth.

Dr. A. F. Clements, of Evansville, returned August sixteenth after having taken post-graduate work in Rochester, New York, and subsequently enjoying a Canadian fishing trip.

Union Hospital, of Terre Haute, now has the baby room of the maternity ward air-conditioned, and it is believed to be the only air-conditioned room for babies in this section of the country. The equipment is being paid for by contributions from physicians and members of civic clubs.

The Fort Wayne Rotary Club was addressed by Dr. Thurman B. Rice, of Indianapolis, July twenty-seventh. Dr. Rice's subject was "The Art of Living."

Dr. George W. Wagoner, of Burrows, and Miss Betty Lou Kasch, of Logansport, have announced their wedding which took place June 11, 1933, at Rockfield.

Dr. Herman G. Morgan has begun his twenty-fifth year of service as secretary of the Indianapolis City Board of Health. Dr. Morgan was given the opportunity to complete a quarter of a century as executive head of the department when he was reappointed July twenty-fourth.

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Dr. William Gitlin has entered the practice of medicine at Bluffton in the office of his brother, Dr. M. M. Gitlin.

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Plans have been made for the construction of a hospital wing at the county infirmary of St. Joseph County, in South Bend, to provide medical facilities for 25 to 30 inmates. Decision to add the wing was made by the board of county commissioners following a report by the public relations committee of the St. Joseph County Medical Society which made a study of the hospitalization problems at the infirmary.

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The new McDonald Hospital in Warsaw was open for inspection July eighteenth and nineteenth. Patients were accepted for the first time on July twentieth. The institution was visited by 2,500 persons during the open-house period.

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Dr. P. J. Coulter, of Tell City, has been appointed Perry County health officer to succeed the late Dr. D. S. Conner, of Cannelton.

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The United States Civil Service Commission announces open competitive examinations for the positions of Medical Officer, Associate Medical Officer, and Assistant Medical Officer. Applications must be on file with the U. S. Civil Service Commission at Washington, D. C., not later than September 8, 1936.

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The Toledo *Blade* for August 6, 1936, carries a complete account of the doings of Michael Erim Brooks, aged 48, teacher and lecturer, who pleaded guilty to the unlawful practice of medicine. He was fined, and the maximum fine was reduced on condition that Brooks promise not to re-engage in the practice of medicine. He had been a student, doctor of psychology, minister, and advance agent for medicine shows. He has been in various parts of the United States.

#### INDIANA STATE FAIR EXHIBIT

This year's exhibit of the Indiana State Medical Association and the American Medical Association at the Indiana State Fair will be held in one of the two State Board of Health buildings.

Free examinations will be made, using the electrical impedance testing machine which is being developed at the Indiana University School of Medicine. A check-up on a large group of individuals is being made to determine how the find-

ings compare with the ordinary basal metabolism test now being used.

The Scientific Exhibit division of the American Medical Association will supply materials on (1) Disinfectants; (2) Dangers of Self-Diagnosis; (3) Information about Health. If possible, duplicates of the series of nine groups dealing with medical discoveries of the last century, as shown at the Century of Progress Exposition in Chicago, will be included.

#### AMERICAN BOARD OF INTERNAL MEDICINE

The American Board of Internal Medicine completed its organization on June 15, 1936. Officers chosen were Walter L. Bierring, M.D., Des Moines, chairman; Jonathan C. Meakins, M.D., Montreal, vice-chairman, and O. H. Perry Pepper, M.D., Philadelphia, secretary-treasurer. These officers with the following six members constitute the present membership of the board: David P. Barr, M.D., St. Louis; Reginald Fitz, M.D., Boston; Ernest E. Irons, M.D., Chicago; William S. Middleton, M.D., Madison; John H. Musser, M.D., New Orleans, and G. Gill Richards, M.D., Salt Lake City.

The organization of the board is the result of efforts on the part of the American College of Physicians in conjunction with the Section on Practice of Medicine of the American Medical Association, and these two organizations are represented in the membership of the board. The board has previously received the official approval of the two bodies fostering its organization as well as that of the Advisory Board of Medical Specialties and the Council on Medical Education and Hospitals of the American Medical Association.

The purpose of the board will be the certification of specialists in the field of internal medicine, and the establishment of qualifications with the required examination procedure for such certification. While the board is at present chiefly concerned with the qualification and procedure for certification in the general field of internal medicine, it is intended later to inaugurate similar procedures for additional certification in the more restricted and specialized branches of internal medicine, as gastroenterology, cardiology, metabolic diseases, tuberculosis, allergic diseases, etc.

The first written examination will be held in December, 1936, and successful candidates will be eligible for the first practical or clinical examination which will be conducted by members of the board near the time for the annual session of the American College of Physicians at St. Louis in April, 1937.

The fee for examination is forty dollars, which must accompany the application, and an additional fee of ten dollars is required when the certificate is issued. Application blanks and further information may be obtained by addressing the office of the chairman, Walter L. Bierring, M.D., 406 Sixth Avenue, Des Moines, Iowa.

## INTER-STATE POSTGRADUATE MEDICAL ASSOCIATION

The twenty-first International Assembly of the Inter-State Postgraduate Medical Association of North America will be held in the public auditorium of St. Paul, Minnesota, October 12, 13, 14, 15, and 16, with pre-assembly clinics on Saturday, October 10, and post-assembly clinics Saturday, October 17, in the hospitals of St. Paul.

The program committee has attempted to provide an intensive postgraduate course covering the various branches of medical science. The program has been carefully arranged to meet the demands of the general practitioner, as well as the specialist. Extreme care has been given in the selections of the contributors and the subjects of their contributions.

In cooperation with the Minnesota State Medical Association, the Ramsey County Medical Society will be host to the Assembly and has arranged an excellent list of committees who will function throughout the Assembly.

A hearty invitation is extended to all members of the profession who are in good standing in their State or Provincial Societies to be present and enjoy the hospitality of the medical profession of St. Paul. A registration fee of \$5.00 will admit each member of the medical profession in good standing to all the scientific and clinical sessions.

A list of the distinguished teachers and clinicians who will take part on the program may be found on advertising page xxix.

Special railroad rates will be in effect.

For further information write Dr. W. B. Peck, Managing Director, Freeport, Illinois.

## INDIANA UNIVERSITY NEWS NOTES

Dr. Henry O. Mertz, 5365 Central Ave., Indianapolis, has been appointed head of the department of urology of the Indiana University School of Medicine to succeed Dr. William Niles Wishard, Sr., who founded the department in 1887 and has been its head for forty-nine years.

A native of Roundhead, Ohio, Dr. Mertz attended Roundhead High School and Ohio Northern University. He was graduated from the Indiana University School of Medicine in 1908 and became urologist at the LaPorte clinic. Subsequently he became associated with the firm of Wishard, Hamer and Mertz, in Indianapolis. Dr. Mertz is a member of the American Medical Association, the state and city medical associations, the American Urological Association, the American Association of

Genito-Urinary Surgeons and the founders' group of the American Board of Urology.

Appointment of Dr. Carl Habich, Indianapolis, as chairman of the Department of Gynecology at the Indiana University School of Medicine has been announced by Dr. W. D. Gatch, dean of the school. Dr. J. T. Witherspoon has been put in charge of research in the gynecology department.

Dr. Habich is a graduate of the school and has been a member of the gynecology staff about twenty years. Dr. Witherspoon came to the institution recently from Tulane University.

Dr. Habich, a native of Indianapolis, was graduated from Indiana University in 1909 and took postgraduate work at Johns Hopkins University. He is a member of the medical staffs of all hospitals in Indianapolis.

Work is expected to start soon on the new clinical building at the Indiana University Medical Center in Indianapolis for which contracts were awarded by the I. U. Board of Trustees early in August. The total cost of the building will be approximately \$550,000, of which the federal government will pay 45 per cent as a PWA project. The remainder will be paid by the university through a bond issue.

The general contract went to C. R. Wermuth and Company, Fort Wayne, on a bid of \$325,418. Freyn Brothers, Inc., Indianapolis, received the heating and ventilating contract, at \$34,071; Strong Brothers, Indianapolis, plumbing, \$36,479; C. L. Smith Electrical Co., Indianapolis, electric wiring, \$69,103, and Otis Elevator Co., elevators, \$28,465.

The building is to be a five-story structure immediately north of the Robert W. Long Hospital. Each floor will be connected with a corresponding floor of the Long building and the brick exterior will be made to correspond as nearly as possible with the Long unit. Robert Frost Daggett is the architect.

The American College of Dentists conferred the honorary degree of Fellow of the College last month in San Francisco on Dr. G. D. Timmons, secretary of the Indiana University School of Dentistry. The American College of Dentists met in San Francisco in connection with the meeting of the American Dental Association, which Dr. Timmons and Dr. F. R. Henshaw, dean of the I. U. School of Dentistry, attended. Dr. Timmons is a former president of the Indianapolis Dental Society and for two years was secretary-treasurer of the American Dental Association. Dean Henshaw several years ago received the outstanding honor of the dental profession which was conferred last month on Dr. Timmons.

In connection with the San Francisco meeting, Dr. Henshaw was elected supreme grand master of the Delta Sigma Delta professional dental fraternity.

## SOCIETIES — INSTITUTIONS

DAVIESS-MARTIN COUNTY MEDICAL SOCIETY met at Washington, July twenty-eighth, for a general business meeting.

DEARBORN-OHIO COUNTY MEDICAL SOCIETY members met at Aurora, June twenty-fifth, for a dinner meeting. A general discussion of the new public health and maternal and child welfare set-ups formed the program. This was the closing meeting of the season, and all routine business was disposed of.

FORT WAYNE (ALLEN COUNTY) MEDICAL SOCIETY Board of Trustees held a meeting August seventh, at the Chamber of Commerce, Fort Wayne, to take care of routine business and make plans for the coming year.

NOBLE COUNTY MEDICAL SOCIETY met at Luckey Hospital, Wolf Lake, Indiana, July sixteenth, for an elk dinner. "Luckey Day" has become an annual event with the Noble County Medical Society.

SPENCER COUNTY MEDICAL SOCIETY met in Rockport, July thirty-first. Old officers resigned, and the following new ones were elected to take office immediately:

President, J. C. Glackman, Rockport.

Vice-president, C. D. Ehrman, Rockport.

Secretary-treasurer, V. V. Schriener, St. Meinrad.

Delegate, J. C. Glackman, Rockport.

Alternate, Eva Buxton, Rockport.

TIPPECANOE COUNTY MEDICAL SOCIETY held their annual summer outing at the Tippecanoe Country Club, July sixteenth. Golf was enjoyed in the afternoon and a dinner meeting was held in the evening. Attendance was about one hundred.

VIGO COUNTY MEDICAL SOCIETY held its annual picnic at the Quaker Maid Camp, near Terre Haute, July twenty-ninth.

### BUREAU OF PUBLICITY

June 30, 1936.

Present: W. N. Wishard, M.D., chairman; E. Vernon Hahn, M.D., F. M. Gastineau, M.D., and T. A. Hendricks, executive secretary.

The release, "Less Noise Campaign," approved for publication in Monday papers, July 6.

Request for speakers:

March 15, 1937—Mooresville Woman's Club, Mooresville, Indiana. Speaker obtained.

Letter received from a physician asking whether it would be proper for him to have an editorial which appeared in *The Journal of the American Medical Association* copied in his own local paper. The Bureau stated that this would be perfectly proper provided such an article was reprinted verbatim with proper credit given to *The Journal of the American Medical Association* and if it appeared without any doctor's name being connected with it.

Article which appeared in the Bulletin of the New York Academy of Medicine in regard to vivisection brought to the attention of the Bureau. The Bureau turned this article over to one of its members for review.

July 9, 1936.

Present: W. N. Wishard, M.D., chairman; E. Vernon Hahn, M.D.; F. M. Gastineau, M.D., and T. A. Hendricks, executive secretary.

The release, "Poison Ivy," approved for publication in Monday paper, July 20.

Report made that an article on medical pioneers was to be prepared by William Herschell, feature writer of *The Indianapolis News*. This article is to appear in the Saturday *News*, July 11.

The following letter was received from the director of the Bureau of Maternal and Child Health of the Indiana Division of Public Health:

"Enclosed please find copies of letters which the Bureau of Maternal and Child Health has sent to secretaries of all the county medical societies, and to other members of the Indiana State Medical Association who are especially interested in participating in the 'refresher courses' to be offered by our Bureau. It is the policy of the Bureau at all times to work with and under the direction of the Publicity Bureau of the Indiana State Medical Association in connection with this speakers' bureau."

"It is also the policy of the Bureau of Maternal and Child Health to have requests for speakers and programs received from lay organizations referred to county medical society secretaries for their approval. The Bureau is urging each county medical society to take charge of all lay programs whenever possible.

"The following obstetric motion pictures on 16 mm. film have been obtained from Doctor DeLee of the Lying-in Hospital of Chicago, and these will be available for all county medical societies upon their request.

1. The Physiology and Conduct of Normal Labor.
2. The Forceps Operation.
3. Complications of the Second Stage.
4. Post Partum Hemorrhage.
5. The Treatment of Asphyxia Neonatorum.
6. The Prevention and Treatment of Eclampsia."

The Bureau of Publicity was to take this letter up for consideration at its next meeting.

The Bureau instructed the secretary to prepare a preliminary draft of the annual report of the Bureau that is to be made to the House of Delegates at the annual session at South Bend.

Copy of newspaper containing a statement concerning approval which was given by the American Medical Association to a private hospital brought to the attention of the Bureau. The Bureau instructed the secretary to send this article to the Council on Medical Education and Hospitals of the American Medical Association for the consideration of that Council.

July 21, 1936.

Present: W. N. Wishard, M.D., chairman; E. Vernon Hahn, M. D., and T. A. Hendricks, executive secretary.

Minutes of the meeting of June 30 signed. Minutes of the meeting of July 9 approved for signature.

The release, "When to Remove Tonsils," approved for publication in Monday papers, July 27.

Report on medical meeting:

June 23—Rotary Club, Seymour, Indiana. "The Business Man's Heart." (40 present.)

Letter received from the secretary of the Council on Medical Education and Hospitals of the American Medical Association in regard to hospitals which are approved by that organization.

The first draft of the annual report of the Bureau of Publicity was submitted to the members of the Bureau.

The secretary was instructed to invite the head of the Infant and Maternal Welfare Department of the State Division of Public Health to the next meeting of the Bureau.

July 31, 1936.

Present: William N. Wishard, M.D., chairman; E. Vernon Hahn, M.D.; F. M. Gastineau, M.D., and T. A. Hendricks, executive secretary.

The suggested release was not approved for publication by the Bureau.

The director of the Bureau of Maternal and Child Health of the Indiana Division of Public Health attended a meeting of the Bureau and discussed the question of the program of education by the Indiana State Division of Public Health through the use of medical speakers before medical and lay audiences. The Bureau reasserted the principle that the lists of subjects to be discussed by such speakers might be sent to lay groups, but no speakers' names should be listed.

A letter was received from the chairman of the Committee for the Study of Puerperal Mortality of the State Association in regard to the state-wide distribution of a pamphlet upon the problem of maternal welfare sponsored and printed by the Indianapolis Medical Society. The letter explained that this pamphlet is distributed "to applicants for marriage licenses by the county clerk of Marion County." The chairman of the committee recommended to the Bureau of Publicity that this pamphlet or a similar sheet be distributed with all marriage licenses issued in the State of Indiana. This matter was taken under advisement by the Bureau of Publicity, the members taking the pamphlets with them for further study in order that the discussion may be continued at the next meeting of the Bureau.

Letter received from a member of the Pioneer Memorial Committee of the Indiana State Medical Association in regard to the trip that is to be made to Sullivan, Indiana, at some future date, to visit the grave of Jane Todd Crawford.

August 11, 1936.

Present: William N. Wishard, M. D., chairman; E. Vernon Hahn, M.D.; and T. A. Hendricks, executive secretary.

The release, "Ready for School," approved for publication in Monday morning papers August 17.

Request for speaker:

Oct. 7.—Annual breakfast and business meeting of Woman's Auxiliary to the Indiana State Medical Association at South Bend. The Bureau suggested that the title of the talk should be "What Can the Woman's Auxiliary Contribute to the Practice of Medicine?"

Final review and corrections of the annual report of the Bureau, including the introduction completed and approved by the Bureau for publication in the convention number of THE JOURNAL.

Letter in regard to speakers who have volunteered to talk upon programs instituted by the Infant and Maternal Welfare Department of the State Division of Public Health brought to the attention of the Bureau. This matter was discussed by the Bureau and a formal answer to the letter was to be prepared at the next meeting of the Bureau.

A review was made to the Bureau by one of its members on the pamphlet which was submitted to the Bureau by the chairman of the Committee of the State Association for the Study of Puerperal Mortality. The Bureau was to consider this matter further at its next meeting.

Proposal made that the suggestions for speakers which have served as standing rules of the Bureau for a number of years be amended so that rule No. 6 will read as follows:

6. It is suggested that as far as possible speakers avoid presenting "original" views and opinions which dissent from generally accepted medical teachings. Every doctor speaking to a lay audience represents the entire profession, and should endeavor to interpret its composite beliefs fairly.

This amendment was approved by the Bureau and hereafter all copies of these suggestions will contain this added sentence.

The following letter was received from a pharmaceutical company in regard to an article which appeared in the Indianapolis News concerning medical heroes and heroines of Indiana:

"Thank you very much for the clipping from the Indian-

apolis News of July 11th, which contains the excellent account of heroes and heroines of pioneer times and their contribution to the advancement of medicine. The article contains much of the information I am seeking, and I am very grateful."

Pamphlet from the Eyesight Conservation Committee of the Brooklyn Health Council received and reviewed by the Bureau.

The secretary was instructed to invite the chairman of the Public Relations Committee of the Marion County Medical Society to the next meeting of the Bureau.

## INDIANA MEDICINE IN RETROSPECT

(Continued from Page 502)

to the medical abilities and knowledge of any of the members, the member with whom they are dissatisfied, shall, if required by a majority of the members at a regular meeting, appear before the Censors within ten days after being informed of such request, and be by them examined as candidates for practice according to direction given them by law. If such member refuses or neglects to appear and be examined according to request, or if during the examination, he shall appear to the Censors grossly ignorant of the profession of Physic and Surgery, he shall by a majority of the society be expelled.

Passed Dec. 9th, 1817.

B. Bradley, Sec'y.

## JOHN SHAW BILLINGS AND THE CENTENARY OF THE ARMY MEDICAL LIBRARY

(Continued from Page 427)

advantage of the opportunities which the institution offers. Its bibliographic and photographic departments are available to us through direct correspondence and the vast majority of its books are available through an exchange system with our local libraries. The library habit cannot but make better doctors of us all.

Sir William Osler, in his obituary of John Shaw Billings in the *British Medical Journal*, memorialized him thus: "There is no better float through posterity than to be the author of a good bibliography. Scores know Conrad Gesner by the 'Bibliotheca' who never saw the 'Historia Animalium.' A hundred consult Haller's bibliographies for one that looks at his other works, and years after the iniquity of oblivion has covered Dr. Billings' work in the army . . . the great index will remain an enduring monument to his fame."

**MAKE YOUR HOTEL RESERVATIONS FOR THE SOUTH BEND SESSION NOW!**  
**FOR RATES AND RESERVATION COUPON,**  
**SEE PAGE 441.**

## UNDER THE CAPITOL DOME

(Continued from Page 504)

who said that in many counties these local organizations are desirous of aiding health work done by the counties, and that while county officials wish to receive the support they were in doubt as to the legal right to accept funds.

"I do not think there is any express statutory authority authorizing the county treasurer to accept contributions such as are described in your letter," the opinion of the attorney general said. "I think, however, that there is no prohibition which would prevent the county from accepting voluntary contributions to its general fund, but I do not think that the treasurer could receive such funds earmarked for any particular purpose." The opinion then sets out that these funds would have to be appropriated from the county general fund by the county councils just as any other money secured by the county.

## REVENUE COLLECTIONS IN INDIANA

From the office of Will H. Smith, U. S. Collector of Internal Revenue for Indiana, it is learned that internal revenue collections from all sources in Indiana for the fiscal year ended June 30, 1936, were \$68,485,731.27; for the fiscal year ended June 30, 1935, the total collections were \$64,013,230.76. Some of the more important items of income on a comparative basis for the two years were as follows:

	1935	1936
Individual Income Tax	\$6,207,239.61	\$8,520,874.51
Corporation Income Tax	7,833,902.30	11,361,491.03
Distilled Spirits Tax	20,150,482.66	25,926,464.67
Beer Tax	7,176,821.53	9,148,862.61
Estate Tax	1,936,821.69	1,614,922.71
Gift Tax	1,580,736.30	1,221,456.05
Electrical Energy Tax	681,126.72	751,719.00
Autos and Parts Tax	1,510,228.43	1,800,430.77
Mechanical Refrigerator Tax	1,001,665.32	1,677,192.72
Capital Stock Tax	1,092,457.99	1,128,875.57
Processing Taxes	10,007,852.78	636,192.49

Attention is called to the fact that in the fiscal year ended June 30, 1935, there was collected in Processing Taxes \$10,007,852.78 and in the fiscal year ended June 30, 1936, there was collected in Processing Taxes \$636,192.49, a net loss of \$9,371,-660.29. Notwithstanding this loss of Processing Taxes a net increase in total collections was shown of \$4,472,192.49.

The collections for the fiscal year ended June 30, 1936, are the peak collections over the past ten years.

INDIANA STATE BOARD OF MEDICAL REGISTRATION  
AND EXAMINATION

Certificates issued during the period from April 1, 1936, to June 30, 1936:

Certificates issued upon examinations:	
Edward Richard Cotter	Issued 6-10-36
Francis H. Fox	Issued 6-13-36
Harvey W. Sigmund, Jr.	Issued 6-13-36
Loren Francis Ake	Issued 6-15-36
James Crawford	Issued 6-15-36
Arthur Donald Rosenthal	Issued 6-15-36
Burton V. Scheib	Issued 6-15-36
Howard Edward Sweet	Issued 6-15-36
Adolph C. Przednowek	Issued 7-7-36
Ivan Arthur Munk	has not as yet been issued.
Reciprocal certificates issued for the period April 1, 1936, to and including June 30, 1936:	
Holger M. Anderson	Issued 3-25-36
James Oliver Conklin	Not Issued
Wm. Lawrence Daves	Issued 4-29-36
Lawrence J. DeSwarte	Issued 4-27-36
Edward E. Edmondson	Issued 2-22-36
Hugh Wilson Eikenberry	Issued 5-16-36
Ralph Arthur Elliott	Issued 6-2-36
Edward B. Gall	Issued 5-12-36
Leslie M. Jones	Issued 5-19-36
Edward J. Purchla	Issued 5-12-36
Edward L. Rigley	Issued 6-17-36
Maurice A. Spalding	Not Issued
Carl Wm. Wagar	Issued 2-17-36
Morris R. Weidner, Jr.	Issued 5-9-36
Russell A. Winters	Not Issued

(Mail returned and cannot locate)

Doctors Axentie T. Babienko and Marie N. Simonsen did not remove to this state. Their papers are on file in this office and permits will be issued when they do establish themselves in the state.

## BOOKS

## BOOKS RECEIVED

WILLIAMS' OBSTETRICS. A TEXTBOOK FOR USE OF STUDENTS AND PRACTITIONERS. By Henricus J. Stander, M.D., F.A.C.S., professor of obstetrics and gynecology, Cornell University Medical College; obstetrician and gynecologist-in-chief, New York Hospital and Director of the Lying-In Hospital, New York City. Seventh edition. A revision and enlargement of the text originally written by J. Whitridge Williams. 1,269 pages with 729 illustrations. Cloth. D. Appleton-Century Company, Inc., New York and London, 1936.

\* \* \*

THEORY AND PRACTICE OF PSYCHIATRY. William S. Sadler, M.D., chief psychiatrist and director, the Chicago

Institute of Research and Diagnosis; consulting psychiatrist to Columbus Hospital. 1,231 pages. Cloth. Price, \$10.00. The C. V. Mosby Company, St. Louis, 1936.

\* \* \*

**AN INTRODUCTION TO MATERIA MEDICA AND PHARMACOLOGY.** By Hugh McAlister McGuigan, Ph.D., M.D., Professor of Materia Medica, Pharmacology and Therapeutics, University of Illinois, College of Medicine, Chicago; and Edith P. Brodie, A.B., R.N., formerly director School of Nursing, Vanderbilt University, Nashville, Tennessee, formerly instructor in materia medica and therapeutics, Washington University School of Nursing, St. Louis, Missouri. 571 pages with 71 text illustrations and 18 color plates. Cloth. Price \$2.75. The C. V. Mosby Company, St. Louis, 1936.

\* \* \*

**THE AMERICAN MEDICAL PROFESSION** from 1783 to 1850. By Henry Burnell Shafer, Ph.D. 271 pages. Cloth. Price \$3.25. Columbia University Press, New York City. Publication date: September 21, 1936.

\* \* \*

**MICROBIOLOGY AND PATHOLOGY FOR NURSES.** By Charles F. Carter, B.S., M.D., director, Carter's Clinical Laboratory, Dallas, Texas; formerly director of laboratories, Parkland Hospital, Dallas, Texas, and lecturer in bacteriology and pathology, Parkland Hospital School of Nursing. 682 pages, with 138 text illustrations and 14 color plates. Cloth. Price \$3.00. The C. V. Mosby Company, St. Louis, 1936.

\* \* \*

**TEXTBOOK OF PATHOLOGY** (Sixth Edition). By W. G. MacCallum, professor of pathology and bacteriology, The Johns Hopkins University, Baltimore. Sixth edition, entirely reset. 1,277 pages with 697 illustration. Cloth. Price \$10.00. The W. B. Saunders Company, Philadelphia and London, 1936.

#### BOOKS REVIEWED

**THEORY AND PRACTICE OF PSYCHIATRY.** By William S. Sadler, M.D., chief psychiatrist and director, Chicago Institute of Research and Diagnosis. 1,231 pages. Cloth. Price \$10.00. The C. V. Mosby Company, St. Louis, 1936.

This is an unusually complete text as well as a reference book on the subject. It goes much further than the average work on psychiatry in that it attempts ably to handle the subject of mental hygiene counselling throughout the life of the patient, if so indicated. Its treatment of the patient as a unit or the handling of a personality as a whole is most appealing. Practically all professional groups may well have this book in the library for reference. This phase particularly is enhanced by the ready index and a glossary which in reality amounts to a psychiatric dictionary. Throughout the work there is an emphatic approach toward the treatment of the patient, not only by the physician, but by every one rubbing shoulders with that patient.

\* \* \*

**OBJECTIVE AND EXPERIMENTAL PSYCHIATRY.** By D. Ewen Cameron, M.B., Ch.B., D.P.M., physician in charge, Reception Service, Provincial Mental Hospital, Brandon, Manitoba. 271 pages. Cloth. Price, \$3.00. The Macmillan Company, New York, 1935.

In the study of human behavior, the clinical psychiatrist knows too well the fallacies often encountered in prophecy

and prognosis. This book has been an excellent start in recording in an unbiased manner the present status of the so-called basic principles of psychiatry. The author has given the "pros" and "cons" an evaluation of particular importance to the younger members of the profession. He has not curbed the desire to look into the heavens but at the same time he has pointed out the necessity of keeping both feet on the ground. In reality, the book covers the subject of psychobiology in an excellent manner. The material is well presented, easily readable, and has a good index.

\* \* \*

**PRINCIPLES AND PRACTICE OF RECREATIONAL THERAPY FOR THE MENTALLY ILL.** By John Eisele Davis, B.A., M.A., senior physical director, Veterans Administration Facility, Perry Point, Maryland, in collaboration with Dr. William Rush Dunton, Jr., editor of "Occupational Therapy and Rehabilitation." 206 pages. Cloth. Price, \$3.00. A. S. Barnes and Company, Inc., New York, 1936.

This book is of special interest to the medical and supervising staffs of hospitals for the insane. Although some theoretical presentation is present, most of the book is practical to the utmost, being based on the several years of experience of the authors. Education, re-education, interest and effort for the different types of personalities and disease entities are ably handled. The glossary and index aids in broadening the scope to which this work can be recommended.

\* \* \*

**NEW PATHWAYS FOR CHILDREN WITH CEREBRAL PALSY.** By Gladys Gage Rogers, director of Robin Hood's Barn, a camp school for children with cerebral palsy; and Leah C. Thomas, director of therapeutics at Robin Hood's Barn. 167 pages. Cloth. Price, \$2.50. The Macmillan Company, New York, 1935.

This book is prepared to aid teachers and mothers in the training of palsied children whose mentality potentially is near normal. The title does not include that restriction and some might be misled when they had in mind the subnormal paralytic. There is stress laid indirectly on the amount of individualization needed in the handling of such cases. The enthusiasm of the authors is stimulating because of this individualization. However, the teacher or mother working with a palsied child must keep in mind that without reasonable intelligence re-education of muscle groups is to be met with discouragement. A splendid bibliography is included, but no, there is no index.

\* \* \*

**PSYCHOPATHOLOGY.** By George W. Henry, associate professor of psychiatry, Cornell University Medical School, New York. 312 pages. Cloth. Price, \$4.00. William Wood and Company, Baltimore, 1935.

This book covers the subject of personality maladjustment in a manner based upon the development of that maladjustment step by step. To do this it has been necessary to evaluate the forces of heredity and environment and also devote sufficient review of the function of the brain as a part of the whole body.

The book is a splendid addition to the library of the medical man even while he is yet an undergraduate. Applicable case reports keep the reader's interest intact. A bibliographic as well as a subject index is included.

# THE JOURNAL

OF THE

## INDIANA STATE MEDICAL ASSOCIATION

DEVOTED TO THE INTERESTS OF THE MEDICAL PROFESSION OF INDIANA

ISSUED MONTHLY under Direction of the Council

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VOLUME 29

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NUMBER 10

### RADIUM TREATMENT OF LESIONS ABOUT THE HEAD, FACE AND NECK

WILLIAM H. KENNEDY, M.D.  
Indianapolis

The structural peculiarities of the head, face, and neck make particular demands upon any method of local therapy. Such therapy must be able to produce uniform effects in spite of the great irregularity of contour that characterizes this region. It must be applicable within cavities as well as externally. It must be susceptible of a high degree of accuracy in dosage and control of penetration, because of the delicacy and importance of the organs and structures located here, and because of their closeness to the surface. In addition, the cosmetic results of treatment demand more serious attention in this than in any other region of the body. To scar the face, to prevent the free play of the mimic muscles, is to mutilate the chief organ of expression of the psyche.

Radium possesses in a high degree the capacity for delicate adaptation required of local treatment in this region. With radium one is able to concentrate, because of the delicacy and importance of value in a field, such as the head, face and neck, where organs small in size but of vast importance lie in such close juxtaposition. In brief, the head, face and neck, with their broken contours, their cavities, their small and complex organs, offer an especially suitable field for radium therapy, and, conversely, radium is in many respects an ideal source of radiations for treatment in this field.

Radium technic affords a great variety of methods for delivering the radiations to the lesion. There are molds and flat applicators for surface irradiation, tubes for insertion into cavities, needles and seeds for bringing the source of radiation within the tissues. With one or another or often with combinations of these technics the vast majority of lesions of the head, face and neck are

approachable for effective irradiation. The ear, nose and cheek offer suitable opportunities for cross-firing by inserting radium into the orifice and at the same time applying external radiation with radium.

The possibility of bringing the source of the radiations into the tissues is an advantage which radium possesses over x-ray therapy. By the insertion of removable radium needles or the permanent implantation of seeds containing radon, every part of a lesion may be uniformly irradiated and much larger doses can be applied to the disease focus than is the case when the rays have to pass first through the skin and a layer of healthy tissue and must, therefore, remain within the limits of what these will tolerate. A lesion that is to be given the benefit of this mode of treatment must be accessible for the placing of the needles or seeds, or be made accessible by exposure through a surgical operation. The field we are considering offers numerous and excellent opportunities for this type of therapy. Projecting tumors of the skin are ideally accessible. Needles may easily be applied in the lips. Tumors in the cavity of the mouth, especially those of the tongue, excepting the base, can be treated in this manner without difficulty. Access to the base of the tongue and to the larynx for implantation of radium is a more difficult matter, and in some cases it is obtained by a surgical procedure.

It is in the treatment of malignant tumors that radium has given its most valuable service, and, with the possible exception of the uterine cervix, there is no field in which it has proved of such unquestionable and solid value as the head, face, and neck. With very few exceptions, malignant tumors of that region of the body, both tumors on the surface and those occupying cavities, are sensitive to radiation and the vast majority are of good accessibility for radium treatment with choice of technic.

Treatment of skin cancers form a prominent part of our subject, since by far the greatest number develop on the face. As is well known, cancers of the skin are of two sorts, basal cell and squamous

cell. The basal cell cancer, developing from a stratum of the epidermis that is but slightly differentiated, is highly sensitive to radiation. It is the more superficial, the more benign and the more easily eradicated of the two varieties of skin cancer. Unless too extensive and involving bone or cartilage, it can in practically all cases be depended upon to heal under radium with an excellent cosmetic result. Small growths will heal so that it is impossible to detect their former site. Even very extensive lesions, which have reached a highly disfiguring stage, yield with remarkable ease to radium, if they have not involved bone or cartilage.

The squamous cell cancer takes its origin from the prickle cell stratum of the epidermis. This is a more highly differentiated layer, and hence this type of skin cancer is not as sensitive to radiations as is the basal cell type. Moreover, it is infiltrated and is in all respects more malignant. Most squamous cell cancers of the skin will, however, respond successfully to a suitable technic. Because of their deeper penetration, they require hard rays. Treatment must be more drastic than in the case of basal cell growths, and a more severe reaction must be provoked. All early squamous cell cancers belong unquestionably in the field of radium therapy. About some later cases there is room for difference of opinion. It is in these more difficult cases that experience and judgment, and skill in adapting technic to individual case, come into play. Screening is important. It must be realized

that these growths widen out beneath the surface and that they involve the lymphatics. Hence the surrounding skin area must be treated by allowing the applicator to extend well beyond the visible limits of the lesion. Interstitial irradiation is valuable in bulky or deeply infiltrating squamous cell tumors.

The superior cosmetic results of radium therapy as compared with those of surgery are worthy of mention. There is little loss of substance with radium irradiation, since healing takes place with substitution of tissue. The scar produced by radium is smooth, soft and supple. In consequence, it offers no resistance to the play of the facial muscles and does not destroy the symmetry of the face by pulling on any important structures, such as the eyelid or mouth.

The proximity of cartilage necessitates special care in treating cutaneous cancer at certain sites, notably the ear, the eyelid, and the nose. Among these, the ear is likely to present the greatest difficulty. According to the writer's experience, cancer of the external ear would seem to be increasing in frequency, or else a higher percentage of cases is coming into the hands of the radiologist. Aside from the difficulty occasioned by the proximity of cartilage, squamous cell cancer of the external ear is not a particularly difficult tumor to treat. It appears to be more amenable to treatment than is this variety of cancer in other locations. Its growth on this site appears to be slower and it metastasizes later. (Illustrated in Figure 1.)

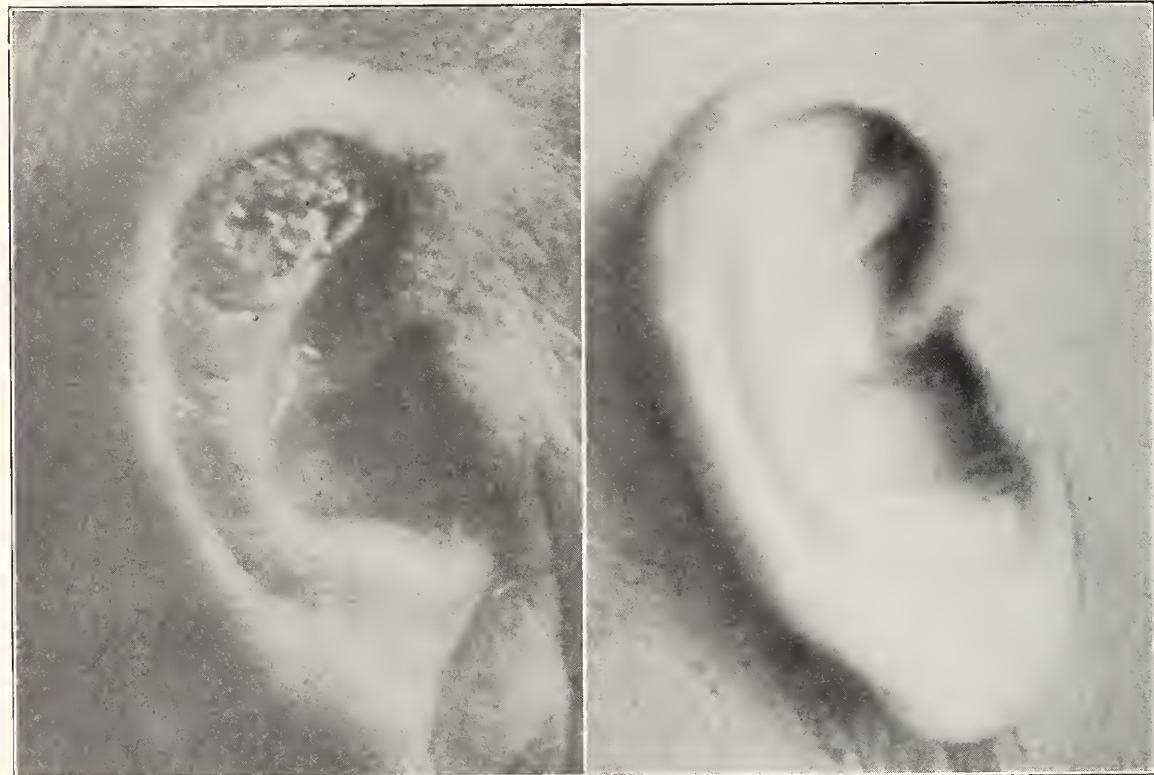


Figure 1.

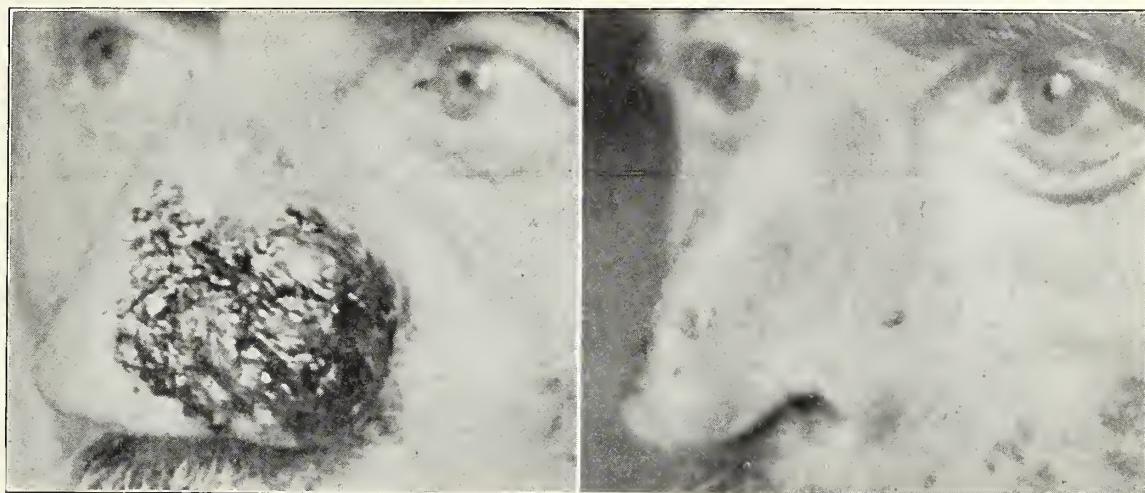


Figure 2.

Cancer of the auditory meatus is usually of the basal cell variety, and responds well to radium. A silver tube may be introduced if the canal will admit it. Radon seeds may be implanted in a deep or voluminous tumor.

It is an urgent matter that all cancers about the ear should be treated early, before the cartilage has become involved.

For cancer of the eyelid, soft rays are advisable if the cancer is of the basal cell variety, but the infiltrative nature of squamous cell cancer requires sufficient filtration to produce vigorous action. Cancer of the eyelid is distinctly a fit object for radium therapy. The eyelid has an important function, and its surgical mutilation is not held to be justifiable. The eyeball itself seems to have a fair degree of tolerance to irradiation. Desjardins<sup>1</sup> several years ago pointed out that the number of reported instances of ocular injury from excessive irradiation is surprisingly small considering the frequency with which the eye has been irradiated in connection with the treatment of various benign and malignant conditions.

Some twenty per cent of all skin cancers develop on the nose. The most frequent site is the tip. The small basal cell cancer of the skin of the nose can

be safely removed by any one of several measures, but the best cosmetic results are obtained by the use of radium. The course of squamous cell carcinoma arising in the skin of the nose differs from that of the same variety of tumor arising elsewhere. The course is chronic, the growth penetrates deeply and extends widely, and, though it rarely invades the lymphatic glands or is the source of metastases, it shows a strong tendency to recur, the same after diathermy excision as after radium treatment. (Illustrated in Figure 2.)

In treating cancer of the forehead and scalp, one must remember the thinness of the layer of tissue that separates the skin from the underlying bone and the tendency of periosteum and bone to radio-necrosis. With technic regulated accordingly, skin tumors on these sites are easily treated with radium.

Next after cancer of the skin, cancer of the lip is the most susceptible to radium therapy. If the glands are not involved, cancer of the lip may be expected to react to radium treatment quite as favorably as cutaneous cancer. Interstitial and surface applications are both used. (Illustrated in Figure 3.)

Cancer of the lip forms a natural transition from the subject of cutaneous cancer to that of cancer of the cavities of the head. For the majority of primary tumors in this field, radium therapy is

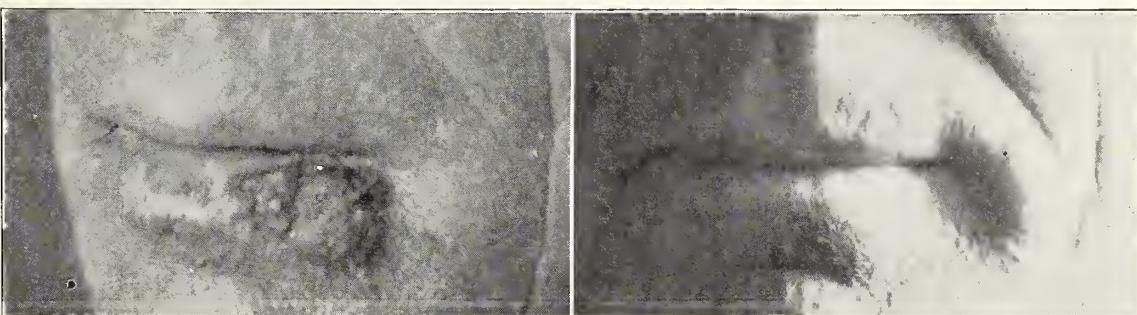


Figure 3.

<sup>1</sup> Desjardins, A. U.: Action of Roentgen Rays and Radium on the Eye and Ear. *Am. J. Roentgenol. & Radium Therapy*, 26:787, November, 1931.

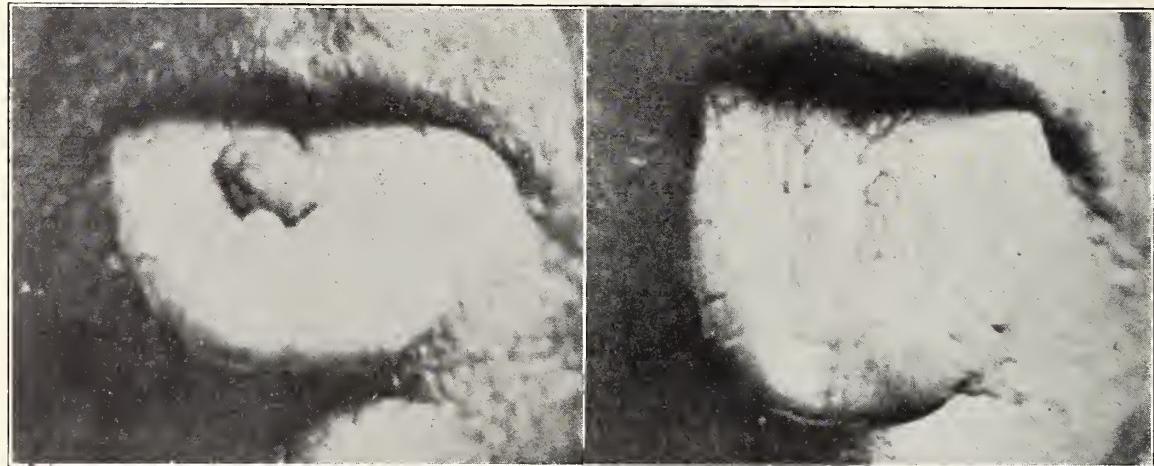


Fig. 4.

the treatment of choice. In certain sites it is necessary to combine a surgical procedure with radium therapy. This is particularly true for the treatment of malignant tumors of the maxillary antrum, nasal fossa, the higher ethmoidal cells and the sphenoidal regions. Diathermic coagulation is many times a valuable adjunct to radium in treating tumors in these cavities. Various types of malignant tumor are found in the nasal sinuses.

Tumors of the nasopharynx are unfortunately seldom diagnosed until they are far advanced and often not until the base of the skull is involved. The best hope lies in irradiation. In treating cancer of the nasopharynx it is essential that a very large dose of rays be applied to the glands as well as to the primary tumor; in every case of cancer in this area it must be definitely assumed that the disease has extended beyond its primary seat.

In the cavity of the mouth most cancers are of the squamous cell variety. The technic of irradiation varies with the site of the tumor and its degree of radiosensitivity. As yet, standard technics have not been worked out for the many different sites and histologic variations. We have our closest approach to a standard technic in the case of cancer of the movable portion of the tongue, for which, today, interstitial radium irradiation with needles or cold seeds, with sufficient filtration and spaced according to an exact scheme to provide irradiation of equal intensity throughout the tumor, has become established as the usual preferred method. Radium has given especially good service in the tongue, where healing of extensive cancers can take place with little loss of substance. (Illustrated in Figure 4.)

Elsewhere in the mouth cavity, needles find extensive use. The soft palate, the uvula, the tonsils, the floor of the mouth, the mucous membrane of the cheek may be thus treated. Cancer of the mucous membrane of the cheek shows considerable resistance to radiation. In these cases surface irradiation, on both surfaces of the cheek, may be combined with interstitial, and electro-coagulation may be combined with the radium therapy. Al-

though the prognosis with radium cannot be called very favorable in cancer of the mucous membrane of the cheek, radium yet appears to offer better prospects than surgery. Cancer of the floor of the mouth is another growth of great malignancy which it is difficult to handle successfully with any method.

Malignant tumor of the tonsil should be treated by irradiation. The results with surgery are bad. The tonsil may be treated by means of seeds or needles, by surface irradiation with radium tubes, or by distant irradiation over neck fields with the radium pack.

Neither radium nor surgery can claim gratifying results in cancer of the larynx. Radium irradiation may be given by means of needles introduced through a surgically provided window, or by the contact method, radium containers being introduced between the vocal cords by means of a sound. We may now, however, be permitted at least the hope that the technic of fractionated, protracted irradiation with huge doses of roentgen rays, introduced as Coutard's method, may show better results than have heretofore been obtained by any other therapy in cancer of the lower pharynx and larynx, since this technic has so far achieved its most brilliant successes in malignant tumors of this region, which are radiosensitive, but so difficult of approach for adequate radium treatment.

The importance of radium in malignant disease is so great that it is apt to overshadow its usefulness in benign conditions. There are numerous nonmalignant conditions of the head, face, and neck in the therapy of which radium holds an important place. One has only to think of angioma, of the different precancerous lesions of the skin and of the many localized dermatoses that may occur on the face and are amenable to radium. Radium gives particularly good service in leukoplakia of the tongue and of the lips. It is of value in chronic ethmoiditis with recurrent polypoid degeneration, in granuloma and papilloma of the external canal and in nasal polypus. Desjardins' is inclined to ascribe these effects to the action of

the rays on leukocytic infiltrations and lymphoid hyperplasias.

In dealing with so wide a subject it has been impossible to discuss details of treatment, to compare statistics or results, or to go into matters that are still the subject of controversy. It has been my object to suggest the special suitability of this field for treatment by radium and the generally superior results that may be achieved here by employing one or another of the various methods of applying radium rays.

We are rapidly passing beyond the period of empiric treatment in radium therapy, the period when each man groped and experimented, and worked out his own technic by trial and error. Some years ago the writer<sup>2</sup> expressed the hope that a universal standardization would before very long result from combined experience. That time is probably now within sight, and our gratitude must go not only to our brother radiologists in many lands, but also to the workers in the physical laboratories, who are giving us the means to calculate and standardize our dosage in a manner not possible a few years ago, and who are revealing to us the laws under which, in ignorance, we have been working. But in learning to appreciate the physical laws of our science, we must never forget that we have to apply those immutable laws to physiologic conditions that are ever varying, that we are, after all, working not on a piece of laboratory apparatus but on that most incalculable of entities, the human patient. With all our gratitude for the invaluable standardization that combined therapeutic experience and the research of the physical laboratory are now almost daily bringing us, let us remember that as practising radiologists we still have our own peculiar problem, that problem of the individual patient, that cannot be standardized, and that makes us—and must keep us—clinicians.

#### SUMMARY

From the topographic standpoint, the head, face, and neck with their broken contours and multiplicity of divergent planes, present a field demanding great adaptability in any agent for local therapy. The various technics of radium application meet this demand in a satisfactory manner.

From the anatomic standpoint, this field, in which important organs of small dimensions are brought together in close proximity, is peculiarly suitable for radium therapy, because with radium it is possible to concentrate the radiations in very small areas, and, with the variety of technics that are available, to obtain maximum results in the lesion with the minimum risk of damage to adjacent structures.

From the histologic standpoint, malignant tumors in this field are favorable objects for radium therapy, because with few exceptions their cells are radiosensitive.

The great majority of tumors in this field are conveniently accessible for interstitial irradiation.

Radium is the method of choice for nearly all malignant tumors in this field and for many non-malignant tumors, precancerous lesions of the skin and mucous membranes, and circumscribed dermatoses, especially when these are localized to the eyelid, nose, and region of the ear. The cosmetic results of treatment are of peculiar importance in this field. The cosmetic results after radium treatment are far superior to those after surgery and are frequently superior to those after application of x-rays. The radium scar is soft, elastic, and often invisible.

612 HUME MANSUR BLDG.

## OPERATIVE INFECTION

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All institutions at some time have a superabundance of dirty wounds which call for an inquiry as to cause. Such a situation came to us some time ago, a survey was made, and the usual conclusion reached: "It had happened."

It perhaps seems strange today that a modern medical journal should publish an article which does not deal with charts, hundreds of cases, dogs, cats and guinea pigs, deep chemical findings, or biological deductions, but perhaps it is well, if only for diversion, to consider things from the point of experience, reason, and trial and error.

With all the improvements in surgical technique, we still too frequently inspect the surgical wound on the third or fourth day and find anything from a severe infection of the wound to a hematoma or dirty discharge of a low grade infection. This for a long time was laid upon bad cat gut and poor sterilization of instruments, which we can say today has been thoroughly discredited. Cat gut, improper heat sterilization, and the patient's physical condition have been the most favored alibis for wound infection.

It is not my intention to go into an extended discussion of chemical antisepsics and their value. It is enough to say that anyone who will take the time to go into the literature of chemical antisepsis will find that there is serious doubt that they are all-important.

On preparing the site of operation, we, in the beginning of modern surgery, used violent means to try to kill bodily every microbe that might be in the vicinity or even in the room. It was not long until we found that this was not desirable, and to do such a thing was impossible, and learned that there was something else living in the vicinity besides bacteria which was harmed by this procedure. Since then, in the preparation, we have vacillated between so-called asepsis and antisepsis. Our chemical engineers have taken quite a part in this in attempting to devise or construct a

<sup>2</sup> Kennedy, William H.: Radium Treatment of Epithelioma of the Face. *Radiology*, 6:52, February, 1925.

chemical antiseptic which would destroy bacteria without harming normal tissue and give us sterilization at the site of the wound. Lately, we have been intrigued with various colors and odors until they now form a large part of the preparation of a surgical wound. This has proceeded so far in the eyes of orderlies, nurses, and especially the uninformed, that many of them consider that the application of one of these antiseptics, leaving the site with some brilliant color, solves the entire problem, and perhaps has led us to neglect some of the simpler things, which, after all, are much more important.

Our very early surgery was done successfully by men who were naturally of cleanly habits in places where septic bacteria were infrequent. To illustrate this point, I have only to call to your mind the time when hospitals were the most dangerous places to take a patient with a wound. Many of them were built of wood in separate units which could be burned down when hospital gangrene took charge of the hospital.

To consider the different ways, the different things used, and the different views of men on preparation of the site for surgical wounds, it is apparent that there must be something fundamentally wrong in what we consider the proper things to do before an operation. Recently I made a survey of a goodly number of representative hospitals in the United States, asking them to give me their preparation of the surgical site for operation. This list included Peter Bent Brigham, Cleveland Clinic, Cornell Medical Center, University of Pennsylvania Hospital, Presbyterian Hospital of Chicago, Barnes Hospital, Ford Hospital, Pawtucket Memorial Hospital, and many others.

From these reports, which they gladly gave me, it was easy to be seen that they were disappointed in their preparation, that they doubted very much the chemical sterilization of a wound, and there was no agreement amongst them except in some of the simpler things in preparation. They all practically agreed that:

1. Sterilization of the site of the incision is impossible by any means that we now know.

2. Careful shaving of the operative site is desirable and important.

3. Scrubbing of the site of the operation with a soft brush and soap is very important, and that tincture of green soap is the best soap to be used.

4. It is practically an agreement that ether or acetone is perhaps the best thing to use to remove the oil and fat from the surgical skin.

5. The chemical antiseptics most favored in their order were (1) tincture of iodine, 7% and 3½%; (2) mercurochrome; (3) merthiolate; (4) solution of bichloride of mercury 1/1000; (5) picric acid solution; and none were satisfied with their chemical antiseptic.

The chemical antiseptics used were nearly as numerous as the hospitals consulted, and the Presbyterian Hospital, of Chicago, is the only one

that does not use a chemical antiseptic with a color. Their chemical antiseptic is bichloride of mercury.

Peter Bent Brigham stressed marking a fine line with the scalpel and immediate walling off. Several stressed the point of careful shaving and non-traumatic scrubbing. The choice of chemical antiseptic which seemed to carry the weight of surgical opinion was tincture of iodine 7%, but they were careful to qualify that this carried many undesirable things with it. One offered the idea that iodine was the proper thing to use providing it was thoroughly and completely removed before the incision.

Some years ago, being dissatisfied with the chemical preparation of a wound, I started to use a preparation based on cleanliness, the principle of which was to use generous cleansing with green soap and water, using alcohol and ether to remove the fat. I can say that in several hundred cases I have been very much pleased with the result. The present method that I am suggesting was arrived at by our hospital staff when submitting a plan of preparation to be used as a general order in the hospital. This general order as given to the hospital is as follows:

1. Patients are to be given admission bath, put to bed, and shaved.

2. Ambulatory cases, or cases where there is no contraindication, are to be put back in the tub and given a supervised bath, paying especial attention to the proposed site of operation.

3. Patients are returned to bed, then scrubbed with a soft brush, using green soap and water, paying especial attention to the operative site. Alcohol is then used over the entire surface, followed with acetone.

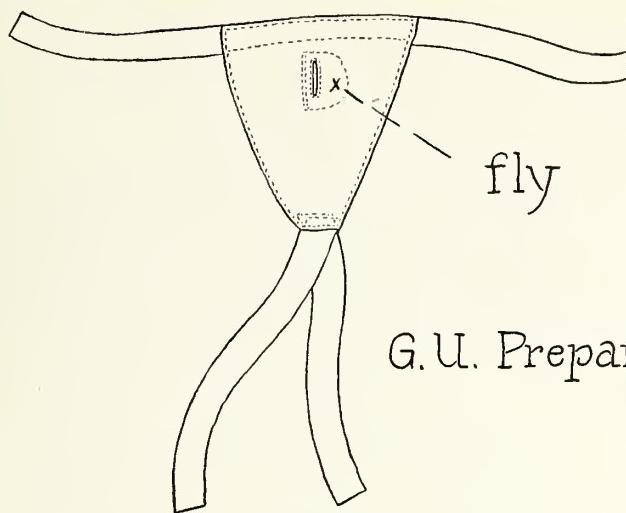
4. The next day, when the patient is on the operating table, acetone is first applied, followed by scrubbing with a soft brush, using green soap and water. This is removed thoroughly, and the patient gone over with alcohol and then with acetone.

5. Emergency cases are given No. 4 preparation in the operating room only.

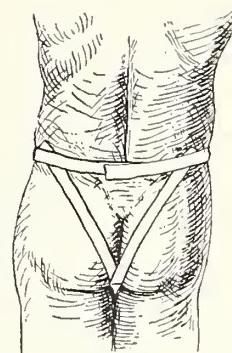
This preparation is to be used for orthopedic cases, genito-urinary cases, and gynecological cases. Acetone is not to be used in genito-urinary or gynecological cases on the male or female genitals.

Briefly, the plan consists of (1) a careful skillful shaving, (2) the supervised bath for ambulatory cases, (3) non-traumatic scrubbing on the operating table with green soap and water, and removal of the oil and fat with alcohol and acetone. It is not hard to understand that an ambulatory case can be shaved, then put in the tub to prepare himself with repeated soap and water better than an orderly or nurse can do this in bed. This especially applies to the lower abdomen and the genitals. The scrubbing in bed is to be done with a soft brush.

The use of tincture of green soap is nearly universally concurred in. An institution with tax-



G.U. Preparation

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Showing accessibility of  
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free alcohol, by omitting the oil of lavender, can make its own tincture of green soap at perhaps ten cents a pint, which makes it competitive in price with any other soap. Acetone is used because of its

cheapness and because it has been found equally as good as ether as a fat solvent. The odor of acetone might be considered against it.

I think it is not overstated that we have all

been dissatisfied with our protection of the surgical site after preparation in bed. Most of us who came down through the period when we first used the scultetus bandage know that patients frequently go down under the bandage with their hands or the bandage is up under their arms, frequently undoing all that has been done in the preliminary preparation. The use of spinal anesthesia has also contributed to the difficulties of keeping the wound site wholly covered when giving the spinal on the operating table. The breaks that can and do occur from this are obvious. This matter was turned over to one of our young surgeons, Dr. M. C. Topping, who has devised a bandage for which we have much hope. However, it has not had the trial of experience.

We should understand thoroughly that the entire story is not told about infections of a surgical wound when we simply take into account the skin preparation. While it is not the intent of this paper to go into other phases of infected surgical wounds, it is well to mention a few things that will give an undesirable wound regardless of the preparation. Among these are failure to use sharp instruments, traumatizing tissue, especially fat, by rough manipulation (this occurs many times from poor anesthesia), incomplete hemastasis, large pedicle tying, the use of extra hard and extra large cat gut, suturing the wound so tightly that the serum which collects in every wound cannot escape, incomplete late walling off, and perhaps several other things. The question of the cat gut being sterile, instruments being sterile, or the gloved hands of the surgeon's assistants and nurses, deserves very little consideration when we are analyzing the question of why a clean wound is dirty.

It is well to remember that the surgeon is the cause of the first magnitude of dirty wounds. Let it be understood that I am not criticizing the use of chemical antiseptics when they are properly used (personally I have not used a chemical antiseptic on my hands for several years, and have no reason to change this), nor am I forming any conclusions as to the treatment of infected wounds by chemical antisepsis, although I do feel that too much emphasis has been put on them even in these cases. It is the intention to convey that we are neglecting to do thoroughly the simpler things that, after all, are more important. If the nurses, orderlies, and perhaps the surgeons can be taught this, I firmly believe that clean wounds will be less frequently dirty.

Halsted once said, "Cleanliness makes modern surgery possible." Ochsner said, "Don't tie tight," and "Stay away from pus like you stay away from sin." Deaver passed the classical compliment upon his friend, Dr. George Crile, "Treats tissue tenderly." These aphorisms it is well to remember lest the surgeon forget that he and he alone may be the cause of dirty wounds.

221 SOUTH SIXTH ST.

## THEORIES OF SLEEP

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The antiquated ideas as to the physiology of sleep that are put forth in the recent editions of Howell's "Human Physiology" and the slightly less antiquated theories found in Starling's "Human Physiology" (1930 edition) make it imperative for one desiring any accurate information on the subject to consult the journal literature.

The present status of the theories of sleep is far from a complete and satisfactory explanation of the phenomenon but the relatively large amount of published results<sup>1</sup> emanating from the leading physiological laboratories of this country and Europe point toward the securing of a sound physiological solution in the very near future.

That such a tremendously interesting bodily process and one so apparently accessible to study should be so evasive in yielding an explanation satisfying to the physiologist is perplexing. Curiously enough until recent years the physiologists were content to leave the problem in the hands of the psychologists. Up until 1912 one of the best books on the subject (*Le Probleme Physiologique du Sommeil*) was written by the psychologist Henri Pieron.<sup>2</sup>

The textbook statements which send even the least curious individual to the journals are, quoting from Howell<sup>3</sup>: "Anemia Theories of Sleep:—It is known that experimental interference with the supply of blood to the brain brings on unconsciousness practically immediately. Quite naturally it has been suggested that the alternation between sleeping and waking may be connected with a rhythmical variation in the blood flow through the cortex. . . . Numerous facts in Physiology have made it probable that during sleep there is . . . a condition of cerebral anemia. On the basis of the plethysmographic experiments mentioned . . . the author has proposed a theory of sleep in which the diminished flow of blood to the brain is explained and is assumed to be the chief factor in bringing on sleep. The author also concludes from his observation that the brain must possess an efficient supply of vasoconstrictor nerves, which during the waking hours are in tonic activity, but in sleep suffer a diminution in tone that leads to a local dilatation."

The last statement by Howell is necessary to keep his theory in line with the work of Shepard<sup>4</sup> whose observations upon two individuals with skull defects (making possible plethysmographic

<sup>1</sup> Kleitman, Nathaniel: Bibliography on Sleep. *Physiological Reviews*, ix, pp. 624-665.

<sup>2</sup> Pieron, Henri: *Le Probleme Physiologique du Sommeil*. Paris, 1913.

<sup>3</sup> Howell, William H.: Textbook of Physiology. W. B. Saunders & Co., Philadelphia, 1927.

<sup>4</sup> Shepard, W.: The Circulation and Sleep. New York, 1914.

studies) showed an actual increase in volume of brain during sleep.

In the work of Pieron already cited, the author gives an excellent summary of the important theories in favor up until 1913. He makes a distinction between partial theories which explain the mechanism of going to sleep, and complete theories which explain the biological necessity of sleep. Those theories which are of more or less historic interest, osmotic theory, dendritic retraction theory, and Shepard's theory will be briefly reviewed.

#### OSMOTIC THEORY

This explanation held that the nerve-cell as the result of its functional activity becomes saturated with water and so consequently diminishes in excitability. Thus an elaboration of this idea followed, i. e., that the osmotic pressure of the cell having increased, it drew in water from the surrounding lymph. The lymph losing water increased in its osmotic pressure and so in turn withdrew water from the blood, which became more viscous. Viscous blood flows more slowly, hence a slowing of circulation through the brain and consequently sleep. Such a fanciful speculation was refuted by Pieron who showed that a hypertonic condition of blood produces not somnolence but restlessness and even convulsions.

#### DENDRITIC RETRACTION

This theory, advanced by Mathias Duval in 1895 but now discarded, suggested that in sleep there occurred a retraction of the dendrites of the nerve cells of the central nervous system so that contact was broken and therefore associative brain processes were interfered with. There is no reliable histological evidence to uphold this.

#### TOXIC THEORY

Perhaps the most well known of all the theories of sleep is the toxic theory championed largely by Pieron.<sup>5</sup> From work on dogs subjected to long periods of insomnia this experimenter claimed that he had isolated from the blood and spinal fluid of dogs a sleep toxin ("hypnotoxin") which when injected into a normal dog produced somnolence in the latter. He also reported alterations of the cortical neurones (chromatolysis and vacuolisation) of the frontal region in the layer of large pyramids, and in the polymorphus layer.

There are a number of strong objections to the hypothetical hypnotoxin. Our own daily experiences seem to contradict it. It is a common observation that we can sleep when we are not fatigued. Also certain individuals may awake (quite accurately) at a prearranged hour which would not be in accordance with somnolence from a sleep-toxin.

Other toxic theories have postulated in turn the accumulation of lactic acid, cholesterol, CO<sub>2</sub>, "leucocomaines" (unoxidized products obtained from muscle) and products of metabolism in general. All of these toxins were supposed to be the result

of waking activity, which were destroyed or otherwise dealt with during sleep. No adequate experimental data makes these suggestions tenable.

#### SHEPARD'S THEORY

This worker<sup>6</sup> disposes of the brain anemia theory of sleep as already mentioned and puts forth the view that "as we go to sleep we become absorbed in a mass or complex of fatigue sensations. These tend strongly to inhibit other processes, especially motor activity and consciousness of strain sensations from the muscles." Here again the flaw in the theory lies in the fact that under ordinary conditions fatigue precedes sleep, but one need not be fatigued in any sense (muscular or mental) in order to fall asleep.

These constitute the major theories of sleep which now have only an historic significance. The three outstanding modern theories will be considered in more detail. Of the three theories, that of Kleitman<sup>7</sup>, which the writer favors, will be discussed last.

#### I. GENERAL INTERNAL INHIBITION—PAVLOV'S THEORY

The theory of the conditioned reflex is now well established physiologically.<sup>8</sup> The basis of the conditioned reflex phenomenon in man and animals is that any stimulus whatever can by training be linked up with any response. Also it was found that not only excitatory responses (like the flow of saliva) could become linked to any stimulus, but that inhibitory responses could be similarly linked so that, for example, while the dog might learn to respond to the sound of a bell with a flow of saliva, the sound of a metronome could by training be made to result in an arrest of salivary secretion (instead of an excitatory process of secretion). An active inhibitory process was set up by the stimulus. Later it was shown that these two processes, excitation and inhibition, could be mingled in such a way that the one followed the other after an interval. The conditioning stimulus was "reinforced" only after an interval of several minutes, i. e., the dog was fed only after an interval of three minutes had elapsed from the application of the stimulus. In this way, after considerable training, the result was obtained that no secretion at all occurred during the first three minutes after stimulation (inhibition persisting) and was followed at the end of that time by a copious flow of saliva. This is called a "delayed" reflex by Pavlov. He observed that during the time interval of the delayed reflex his dogs would sleep and awake in time for the salivary response. Frequent repetition of the same conditioned stimulus, with the resulting excitatory response, led very quickly to a state in which no excitatory response occurred.

<sup>5</sup> Pieron, Henri: loc. cit.

<sup>6</sup> Kleitman, Nathaniel: Studies on Physiology of Sleep: I. The Effects of Prolonged Sleeplessness on Man. *Amer. Jour. Physiol.*, 1923, lxvi, p. 67.

<sup>7</sup> Pavlov, I. P.: Conditioned Reflexes. Oxford University Press, 1927.

There was a cessation of function, which Pavlov regarded as inhibitory in origin. When an animal responded to one stimulus with an excitatory response, and to another very similar stimulus with an inhibitory response, the process of establishment of the responses was called differentiation of a conditioned reflex. In the development of a differentiated reflex, Pavlov found sleep was very apt to supervene during the experiment just as in development of a long-delayed reflex. Both of these reflexes involve inhibitory processes to a marked degree. Pavlov identifies the widely spread inhibition with sleep itself. "Sleep and what we call internal inhibition are one and the same process. . . . Internal inhibition during the alert state is nothing but a scattered sleep, sleep of separate groups of cellular structures; and sleep itself is nothing but internal inhibition which is widely irradiated, extending over the whole mass of the hemispheres and involving the lower centers of the brain as well."<sup>9</sup> According to this theory of sleep, the day's activity leads to an overstimulation of a great number of different cortical points, which then become centers for the irradiation of inhibition; for the theory proposes that inhibition tends to spread over the cortex from a focus. The widely scattered inhibition state descends to affect some or all of the lower cerebral centers, and the result is sleep. The alternation of sleep and wakefulness is then an alternation of general inhibition and general excitation of the cortex and lower centers.

The influence of external stimuli, of light and darkness, of repetition of stimuli in general becomes understandable as a group of conditioned stimuli which are particularly apt to initiate inhibitory processes. The absence of stimuli, like the presence of habitual conditioned stimuli, is a predisposer to sleep in accordance with this theory since absence of excitatory processes in the cortex is particularly favorable for the spreading of inhibition over it.

## II. THE THEORY OF A SLEEP CENTER

There are several fields of inquiry which contribute evidence suggesting that certain areas of the grey matter of the diencephalon are more intimately connected with sleep than other parts of the cerebral structure. The fields in which most success has attended experiments are: (1) Work on experimental animals, (2) pharmacological studies, and (3) clinical studies.

Work on experimental animals showed that in sleep the only detectable blood alterations were in its content of calcium and potassium ions—the calcium being diminished. Demole<sup>10</sup> assumed that while the calcium diminished in the blood it accumulated at the base of the brain in the region of the tuber cinereum; for he obtained profound sleep (closing of eyes, myosis, pulse slowing, muscular

relaxation) on injecting a solution of CaCl (0.03 to 0.08 cc. containing 1 to 3 decimilligrams of calcium) into the grey substance of the subthalamic region mentioned. The depth of sleep was in direct proportion to the quantity of injected solution. Injection of KCl in the same place resulted in stupor, hypertonus, and pupillary dilatation, delirium and epileptiform convulsions. Demole concluded that the results of his experiments are due to the ionic condition of the floor of the third ventricle comprising the suprachiasmatic and parainfundibular grey matter and the tuber cinereum.

The results from the pharmacological studies giving evidence for the location of a sleep center have shown that hypnotic drugs are concentrated almost entirely in the basal ganglia and almost not at all in the cortex or in the centers below the diencephalon. Presumably they are found where they act.

Kieser<sup>11</sup> in the pharmacological analysis of the brains of animals which had been given large doses of hypnotics before death, recovered morphine from the diencephalon (thalamus and walls of the third ventricle) and from the cerebral hemispheres, but never from the mid-brain, pons, medulla or cerebellum. Barbituric acid derivatives were found concentrated mainly in the thalamus and to a lesser degree in the corpus striatum, but never in the hemispheres, medulla oblongata, pons and cerebellum.

The action of hypnotics is essentially depressant; their action in inducing sleep is evidently by depressing the functional activity of the parts where they are concentrated. Thus it would follow that the regions mentioned by Kieser cannot be excitors of sleep—for the drugs would result in insomnia and not the opposite condition. This would argue for the basal grey ganglia being centers for the waking state and not a sleep center.

The important clinical studies contributing to an anatomical location of a sleep center are those of Lucksch<sup>12</sup> and Fulton and Bailey.<sup>13</sup>

Lucksch reported a case of a young (21 year) male patient diagnosed as insufficiency of the aortic valves and endocarditis and an embolism in the floor of the third ventricle. The most peculiar clinical symptom of his case was a fourteen day period of nearly unbroken sleep (only short occasional periods of wakefulness) just prior to the patient's death. Lucksch correlates this symptom with the embolism in the floor of the third ventricle and postulates the presence of a "Schlafzentrum im

<sup>11</sup> Kieser and Kieser: Über die Lokalization des Veronal's der Phenylathyl-und Dialybarbitursäure in Gehirn. *Arch. f. exp. Path. und Pharm.*, 1927, exxv, p. 251.

Kieser and Kieser: Über den Nachweis von Caffein, Morphin und Barbitursäureresten in Gehirn. *Arch. f. exp. Path. u. Pharm.*, 1928, exxxvii, p. 230.

<sup>12</sup> Lucksch: Über das Schlafzentrum. *Zeitschr. f. d. ges. Neurol. u. Psychiatr.*, 1924, xciii, p. 83.

<sup>13</sup> Fulton and Bailey: Contribution to study of tumors in region of the third ventricle; their diagnosis and relation to pathologic sleep. *Journ. Nerv. and Ment. Dis.*, 1929, lxix, pp. 1, 145, 261.

<sup>9</sup> Pavlov, I. P.: loc. cit., Lecture XV.

<sup>10</sup> Demole: Pharmakologisch-anatomische Untersuchungen zum Problem des Schlafes. *Arch. f. Exper. Path. u. Pharm.*, 1927, cxx, p. 229.

Hohengrau des 3 Ventrikels und ihre Umgebung."

Much more impressive data is that recently recorded by Fulton and Bailey.

The patient was a married woman of 28, who for six years had suffered from amenorrhea and polyuria (the latter practically disappearing just before admission to the hospital) and more recently had become excessively adipose till she weighed 220 pounds. For four or five years she had suffered frequently from attacks of drowsiness which occurred at any time (even in the midst of conversation) but from which she could be roused. The somnolence had become almost continuous although with a little effort she could always be awakened for meals. There was also nausea and vomiting, increasing in severity and frequency, failure of vision, headaches, failure of memory, attention, and comprehension. On examination there was primary atrophy of both discs and bitemporal hemianopsia. After an operation (subtemporal decompression) the drowsiness and stupor increased, pyrexia appeared (104°) and she became comatose and died.

Autopsy showed a normal pituitary and no ventricular distension, but a hard tumor occupying the space behind the optic chiasma.

The close correspondence of the area occupied by the tumor with that of the region where Demole's injection of calcium was concentrated is very significant.

The clinical facts certainly argue for the presence of a sleep center—in the sense that a center exists for the recurrence of sleep, its continuance and its cessation.

In neoplasms of the cerebral grey matter of the third ventricle and the aqueduct, the somnolence increases as the growth progresses; destruction is accompanied by an increase in sleep, not a diminution of it as would be expected to occur if the injured region were concerned with the induction of sleep.

Gillespie<sup>14</sup> brings under the general theory of sleep the importance of the grey matter at the base of the brain. He states, "In this view the basal grey matter maintains its characteristics as a center for vital activity, in which episodically a diminution favours the onset of diffuse inhibition known outwardly as sleep. . . . The 'center' is therefore conceived as a focus of activity, upon which not only the cortex but the whole organism depends for stimulation, and peculiarly liable, when its own activity diminishes, to serve also as a focus from which inhibition of activity may radiate."

### III. A THEORY OF SLEEP—NATHANIEL KLEITMAN

On the basis of experimental work on the subject of sleep in man Kleitman<sup>15</sup> proposed a complete

theory of sleep which he called "an attempt to synthesize the many ideas advanced at one time or another by various investigators" and having as a foundation "the doctrine of 'levels' in the central nervous system as first advanced by Hughlings Jackson in 1898." Jackson<sup>16</sup> held that "the most complex nervous arrangements, centers and levels are the least organized; the simple, the most organized." Kleitman cites the respiratory center as a good example of a low level which is well organized and functions in an identical manner throughout life. The highest mental centers are the least organized and easily modifiable permitting learning and establishment of associations. These higher levels being less organized are more susceptible to fatigue—a small dose of alcohol affecting the higher levels can inhibit the natural restraint placed on talkativeness of an individual. The six cardinal points in Kleitman's theory are as follows:

(1) Sleep is an easily reversible inactivity of the highest functional centers of the cerebral cortex.

(2) The inactivity is due to a functional break between the cerebral cortex and the other parts of the nervous system.

(3) The functional break results from a marked decrease in the number of afferent impulses from the sensorium, especially proprioceptive impulses which depend upon the degree of muscle tonus maintained.

(4) Sleep is due to fatigue of the neuromuscular mechanism concerned in the maintenance of muscle tonus.

(5) In the absence of such fatigue, sleep may result from complete muscular relaxation, intentional or unintentional.

(6) Diurnal alternation of wakefulness and sleep is a conditioned phenomenon.

The great preponderance in the number of proprioceptive fibers over other types of fibers suggests that by far the greatest number of impulses reaching the central nervous system are those from the tendons, muscles and joints. When one lies down, the muscles may be relaxed, removing the greater part of the proprioceptive impulses, and so precipitate sleep.

This theory also adequately explains the ability of waking up once having fallen to sleep. The internal stimuli of thirst, hunger contractions of the stomach, distension of the bladder or rectum may become so powerful after several hours of sleep that they overcome all synaptic resistance—reaching the higher centers and waking the sleeper.

The fact that a positive Babinski reflex could be elicited in every subject tested during the sleep that followed insomnia in Kleitman's experiments was interpreted as indicating a functional block of the pyramidal system of fibers. This reflex could

<sup>14</sup> Gillespie, R. D.: *Sleep . . . and the Treatment of its Disorders*. London, 1929, pp. 248-249.

<sup>15</sup> Kleitman, Nathaniel: *Studies on Physiology of Sleep. I. The Effects of Prolonged Sleeplessness on Man*. *Amer. Journ. Physiol.*, 1923, lxvi, p. 67.

<sup>16</sup> Jackson, Hughlings: *Brit. Med. Journ.*, 1898, i, p. 65.

be reversed by rapidly repeated stimulation of the sole of the foot. The depth of the sleep decreased simultaneously. This is interpreted as indicating that a number of subminimal stimuli overcome the synaptic resistance and produce a flexion of the great toe.

In subsequent work on animals (puppies)<sup>17</sup> additional results were obtained supporting the theoretical points enumerated above. The ability of the puppies to remain awake for a long time was shown to be directly related to their neuromuscular endurance. Furthermore, direct evidence was secured showing that anemia of the brain is not a necessary condition for sleep in puppies.

That the rhythmic alternation of sleep and wakefulness is in the nature of a conditioned reflex, Kleitman points out in his first paper. The periodic cessation of activity due to nightfall, coinciding as it did with the end of a day's hunting or fishing, when primitive man had to lie down to relax his musculature, gradually developed a switching off of both afferent and efferent connections of these higher centers and the phenomenon of sleep was the result. With repetition day after day a conditioned reflex could have been set up. From this it follows that diurnal (24 hours) rhythmicity of sleep and wakefulness might conceivably have been six hours, forty-eight hours or any time interval depending on the conditioning. This is the only occasion that the author indulges in extensive speculation and he presents it only to show a possible origin for the rhythm. The data collected and the interpretations rendered are factual and singularly free from mysterious and fanciful postulates.

#### IV. SUMMARY

It is evident that an explanation of sleep must take account of the data from several fields.

In criticizing the three modern theories of sleep just discussed, the following points are clear:

*Pavlov's Theory:* It is not quite a satisfactory one as Kleitman points out in his review of the subject.<sup>18</sup> Sleep may last a long time or a short time. What determines the temporal inhibition? Also if the entire cortex is non-functioning, how is dreaming, involving as it does analysis of sensations on the basis of previous experiences (memory) possible?

*Theory of a Sleep Center:* Apparently there is sound clinical evidence for such an explanation. However, the clinical evidence for the physicochemical process involved in sleep is meagre. That is, explanation of the point of connection between the center and sleep (the physiological functioning of the center) leads one astray from the other data which cannot be neglected. In the review

<sup>17</sup> Kleitman, Nathaniel: Studies on the Physiology of Sleep. V. Some Experiments on Puppies. *Amer. Journ. Physiol.*, 1928, Ixxxiv, p. 386.

<sup>18</sup> Kleitman, Nathaniel: Sleep. *Physiol. Reviews*, ix., pp. 624-665.

(Continued on Page xxiv)

## RECTAL DISEASES FREQUENTLY ENCOUNTERED IN GENERAL PRACTICE\*

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Proctology has been neglected by the internist. Physicians have failed to prepare themselves to diagnose the numerous disorders of the rectum and colon, and consequently the field has become a fruitful one for the charlatan.

It has been the experience of proctologists that physicians in general practice do not attribute systemic disease to infections arising in the anorectal region, but instead believe that inflammation or infection in that region is a result of infection elsewhere in the body. The matter has received considerable attention through discussion by proctologists, but the belief still is held by many that infection in the anorectal region seldom is primary. Proctologists maintain that sometimes infections are primary in this region, and are the cause of other systemic troubles not ordinarily attributed to that source. In order to understand that anal infections such as anal fissure, fistula, spastic conditions of the anal muscles, abscesses, hemorrhoids, cryptitis, and others, originate as infections admitted into the tissues through the anal structure, and chiefly through the crypts, the anatomic characteristic of the region must be known.

The hind-gut extends downward to meet the proctoderm, forming the pectinate line, where the skin unites with and overlaps the mucous membrane in a serrated margin.

At the juncture of the anal skin and the mucous membrane is the pectinate border, marked by a line of condensed connective tissue known as "Hilton's white line," which is of much importance anatomically because it is the point of exit of the nerves which descend between the internal and external sphincter muscles, becoming superficial in this situation. These nerves are numerous and account for the extreme sensitiveness of the parts and for its abundant reflex communications with other organs.

The projections of skin are the papillae, behind which are the Morgagnian crypts. The folds, known as the columns of Morgagni, result from the purse-string effect of the internal sphincter muscle, around the lowest segment of the rectum. There is a change in the arrangement of the structures above and below the pectinate line. The superior hemorrhoidal artery arises from the inferior mesenteric artery and with the middle hemorrhoidal artery, which is derived from the internal pudic

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or inferior vesical artery, supplies the rectum and anus down to the pectinate line. The inferior hemorrhoidal artery originates as a branch of the internal pudic, and supplies the anus, posterior part of the perineum, levator ani, and the anal sphincter. The superior hemorrhoidal vein collects the blood from above the pectinate line and empties it by way of the inferior mesenteric vein into the portal circulation. The inferior hemorrhoidal vein delivers the blood from the lower part of the anus and its margins into the internal pudic, and thence into the vena cava. At the anus there is a network of the superior, middle, and inferior hemorrhoidal veins.

The superior lymphatic zone drains the rectal mucosa into the lymph nodes of the rectum and mesosigmoid. The middle zone is a tributary of nodes about the middle hemorrhoidal artery. The inferior zone has from three to five trunks under the skin at the verge of the anus, and drains through branches which pass over the perineum and into the inguinal nodes.

The nerve supply above the pectinate line is sympathetic, and below it is cerebrospinal. Therefore, slight trauma to the papillae or the anal margin is very painful, whereas trauma to the rectal mucosa itself is not productive of discomfort.

We may realize how serious a lesion of the anorectal region may be when we know that the somatic nervous system is traumatized by pain, and the sympathetic is irritated as well. An anorectal lesion may deplete the nervous system, upset the normal mechanics of the intestinal tract, and ultimately undermine the individual's well-being.

The anal canal is the constricted terminal end of the large bowel, and extends from the point where it perforates the pelvic diaphragm to the external orifice of the anus. The length of the canal is about one inch and is directed downward and backward, forming an angle to the rectum from sixty to ninety degrees. The angulation in

connection with the normal tone of the sphincter muscles is sufficient for competency when in a state of repose. The upper portion is formed from the entoderm and is covered with columnar epithelium. The lower portion is formed from the ectoderm and is covered with pavement epithelium.

The rectum and anus are predisposed to infection by their location. Normal physiology is hampered by voluntary suppression, then artificial stimulation. The use of laxatives and enemas, so constantly employed by patients, exposes the rectum to irritating liquid matter, and the way is paved for infection.

Disorders in remote parts of the body as a result of pathology in the terminal bowel may come about as a focus of infection, as a source of toxic absorption, or as a center of reflex irritation. That infections do originate in the rectum and colon is proved by the large number of conditions in which the bacillus coli is found, such as pyelitis, cystitis, cholecystitis, arthritis, ischio-rectal abscesses, and others. Pathogenic organisms other than the bacillus coli may arise in the anorectal region and grow profusely, from where they may be carried to other parts of the body.

It is a well known fact that toxic absorption and nervous reflex from the anorectal region are responsible for many cases of headache, migraine, biliousness, indigestion, backache, low resistance, and neurasthenia.

#### HISTORY TAKING

Dr. James B. Herrick of Chicago has said that history taking is an art which some physicians never acquire. The complete history is just as necessary in the case of a person suffering with anorectal troubles as with any other. However, there are some essential points to be determined in the history when it is found that the patient has anal or rectal pathology. First among these is pain, and in this connection the physician should make careful inquiry as to the time of the pain in reference to bowel movements; the character of

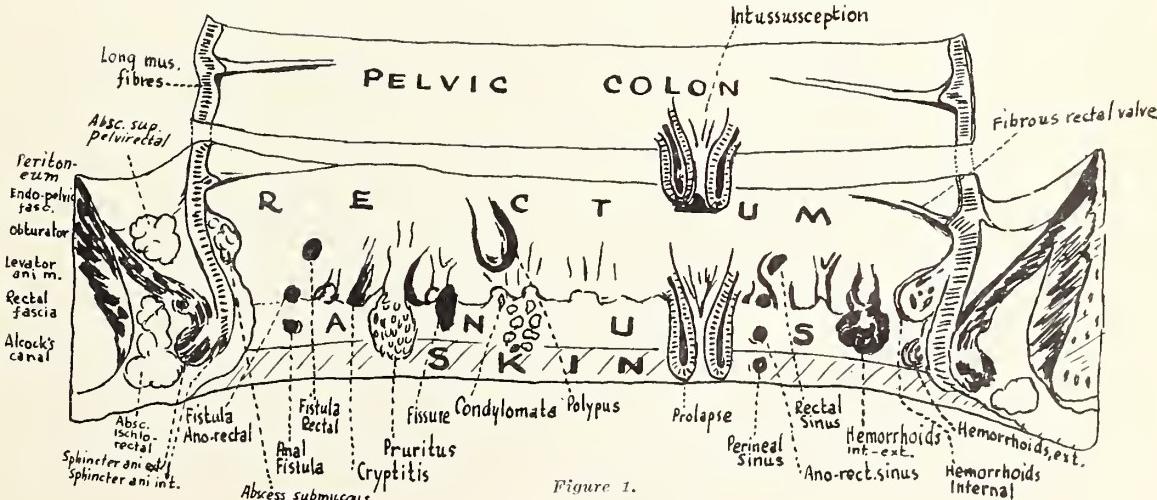


Figure 1.

the pain; and how long the pain has been present. Bleeding is another symptom which should be inquired about—mode of onset, and at what age. The personal history should be gone into as fully as possible.

#### EXAMINATION

There is, perhaps, a lack of general knowledge as to the proper method of making rectal examinations. Sometimes such examinations are avoided because of their unpleasantness. However, a rectal examination is no more disagreeable than a vaginal examination, and it is but little more difficult. Since the proctoscope and the sigmoidoscope are instruments that may be used safely by the internist, every patient passing blood by rectum or having rectal pain should have the advantage of a digital and proctoscopic examination. For all practical purposes, a certain routine may be adopted such as the following:

Place the patient on the left side (Sim's position) with the parts exposed to a good light. Inspection of the external parts may reveal the bluish discoloration which denotes perianal infection, enlargement of external hemorrhoids, skin tags and excoriations, the lower margin of an anal fissure, pruritis ani, or the opening of a fistulous tract. The next step is the digital examination which will reveal whether or not anesthetization is necessary for further examination. When required, infiltration anesthesia will permit a thorough examination without pain.

Next is the examination of the anal canal and lower rectum with an anal speculum, and this examination is important inasmuch as the crypts of Morgagni, the anal papillae and the entire hemorrhoidal area are situated in this terminal portion. It is well to remember that if the instrument cannot be inserted without undue force, the attempt should be abandoned and resort taken to other methods of examination, as mentioned above. Proctoscopic examination should be made with the patient in the knee-chest position or inverted on a Haines table. This will facilitate examination of the rectum and sigmoid.

#### PAIN AND BLEEDING

Probably the two most important symptoms in rectal diseases are pain and bleeding. Their importance can not be over-emphasized.

Pain is the symptom which motivates your patient to consult you. He may have bleeding or other marked symptoms, and still delay consultation, but pain will bring him to your office. Rectal pains usually are increased by bowel movements, and this fact should not be permitted to overshadow other characteristics of the pain. A continuous pain is almost always caused by an acute condition such as abscess, proctitis, thrombotic hemorrhoids, acutely inflamed fissure or an ulcer involving the anus. If the pain precedes the bowel

movement, it indicates pathology in the lower part of the rectum, usually involving the anorectal junction. Pain during defecation means trouble in the anal canal, perhaps an ulcer or fissure. This pain may be relieved with bowel movement, or it may persist for several hours. It should be remembered that hemorrhoids seldom are painful unless strangulated or thrombosed, and can not be diagnosed except by the use of the anoscope. In a case of apparently simple hemorrhoids, pain ordinarily is due to a complicating condition.

Persistent back pain is more often related to the anorectal region and colon than to pathology originating in and around the articular surfaces of the lumbar vertebrae or the sacroiliac joint. These pains are often infectious in character, involving the ramifications of the sacral nerves and sacral plexus.<sup>1</sup>

Bleeding may be a warning signal of serious disease, or it may be a comparatively harmless symptom, and because this fact is well known, the lives of many patients are sacrificed through negligence. Because of the frequency of bleeding as a manifestation of hemorrhoidal disease, many cases of serious rectal bleeding are neglected both by the patient and by the physician. Serious organic disease in the lower bowel has a marked tendency to remain latent, so far as active symptoms are concerned, until the disease is far advanced.

Age is an important factor when bleeding is a symptom. Especially is it important when bleeding is present in a patient who has reached the cancer age—forty or past.

Bleeding may accompany lesions of the upper gastro-intestinal tract, such as peptic ulcer, esophageal varices, and carcinoma, but rarely manifests itself as frank bleeding in the bowel. Bleeding from the upper intestinal tract will be thoroughly mixed through the stool; that from the lower part of the tract will form a coating over the outside of the formed stool. Blood found in the center of a formed stool comes from above the mid-transverse colon.

#### HEMORRHOIDS

Hemorrhoids or piles (synonymous terms) are varicose tumors of the internal and external hemorrhoidal vessels with a tendency of the internal hemorrhoids to bleed and to prolapse from the anal orifice.

The cause of the swelling of the veins of the lower rectum has been ascribed to constipation, sedentary habits, liver stasis or cirrhosis, erect posture of man, poor local hygiene, infection, and many other factors. Most plausible explanations, however, are probably anatomic and inflammatory, and infectious. In the erect posture there is a column of blood from the anal canal to the liver, unsupported by valves and not sufficiently supported by adjacent musculature, and the resulting pressure in

<sup>1</sup> Albee, Fred H.: Myofascitis. *Amer. Jnl. Surg.*, Jan., 1934, p. 70.

the lower end of the column causes hemorrhoids.

Rosser<sup>2</sup> believes that infection enters not through the intact epithelium covering the tumors, but at the narrowest portion of the anal canal, the area most subject to stool trauma—the dentate line—and that the points of entry are probably the anal crypts. (See anatomical illustration—Figure 1.)

Such terms as "bleeding," "blind," "venous," "arterial," "capillary," "itching," hemorrhoids, etc., should be abandoned for the two terms, internal and external hemorrhoids.

#### EXTERNAL HEMORRHOIDS

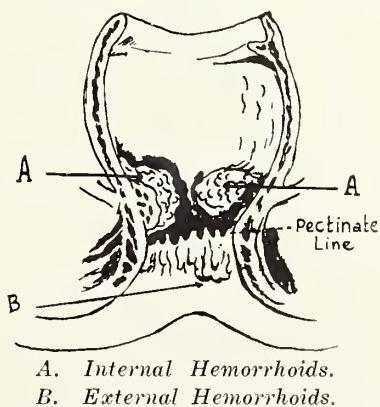
External hemorrhoids are in the distal portion of the anal canal, covered by pavement epithelium. When hemorrhage occurs, it is subcutaneous, resulting in thrombus. The skin tabs or roughened folded skin follows the absorption of thrombosed external piles.

In the external hemorrhoids, the thrombotic type attracts attention usually. The thrombus comes on very suddenly, forming a bluish tumor at the edge of the anal canal. Discomfort is continuous, is not aggravated by defecation, and varies with the size of the thrombus. It is important that the tumor be not mistaken for an incarcerated internal pile, for replacement is not indicated or possible.

Treatment of external piles in the first stage is not indicated except for esthetic or sanitary reasons unless internal piles are present. If the thrombus is large, surgery is indicated. In the early stages, rest and witch-hazel compresses are helpful when aching is a symptom. A small amount of liquid petrolatum each night will soften the stool. Alternating hot and cold compresses also may be tried. Use novocain for relief, or for the local anesthetic in excising or clipping the top of the hemorrhoidal tumor and turning out the clot; trim the edges so that no new clot will form.

#### INTERNAL HEMORRHOIDS

Internal hemorrhoids occur above the pectinate line of the anal canal. When hemorrhage occurs, there is some erosion of the epithelial covering. Internal hemorrhoids are covered with mucous



membrane; external hemorrhoids are covered with skin.

In internal hemorrhoids, bleeding may occur but is not always present. Later bleeding occurs upon straining at stool, and there is some erosion present. The sphincter will lose tonus and protrusion occurs as a result of unusual strain at defecation, and the mass must be replaced manually. In this stage, complications often occur such as fissure, strangulation, infection, anemia (because of hemorrhages) and sometimes pruritis from the excess moisture which appears around the anal surface.

Treatment of internal hemorrhoids in the early stage may be palliative through the use of an aqueous solution of witch-hazel (one ounce) in the rectum twice daily. Use a soft rubber syringe, directed toward the navel. Suppositories or mild astringents are helpful. Rest in bed is essential. The surface of each pile may be touched with five per cent silver nitrate to reduce hemorrhage. If constipation is present, petrolatum may be given daily, and coarse foods should be avoided. Hot packs of glycerine placed against the anus, covered with a hot water bottle, may be helpful. When the acute stage has subsided, the bleeding may be controlled by the injection of a solution of five per cent quinine and urea hydro-chloride which has gained favor with proctologists and is a safe and often effective remedy in internal piles.

Surgical excision is probably the best treatment for the patient who wants assurance of future immunity, or in prolapsed hemorrhoids with fissure or some other complication.

Buie<sup>3</sup> believes that it is not fair for any physician to assume the responsibility of treating hemorrhoids or any benign anal or rectal disease unless he has proved that another condition, particularly a malignant lesion, is not the cause of the symptoms. Delay often is the determining factor in the curability of the trouble.

#### FISTULA

Fistula in ano is usually preceded by an abscess which has ruptured spontaneously or, through improper care, has been allowed to contract without being made to heal from the bottom.

Fistula in ano indicates a discharging sinus, often having one or more openings in the anal canal, and an opening or openings either on the external surface of the body or in a neighboring viscous, or both, as for examples, the vagina, bladder, urethra, uterus, prostate gland, seminal vesicles, or the bowel itself. The anus is usually the primary seat of the disease. From the infection in one or more of the anal crypts, the disease progresses through various stages to formation of the fistula. In the search for the internal opening, the examiner often passes beyond the margin where the crypts are situated, and looks too high.

The majority of fistulae are preventable provided the abscess which precedes receives the correct treatment in the first instance. A history of

<sup>2</sup> Rosser, Curtice: Hemorrhoids. *Journal Lancet.* Liii 21; Nov. 1, 1933, p. 584.

<sup>3</sup> Buie, Louis A.; Bargen, J. A.; Rankin, F. W.: The Colon, Rectum and Anus. P. 667. W. B. Saunders Co., 1932.

increasing pain and tenderness, with a palpable tender mass to the side of the anus, is sufficient to warrant surgical interference. Waiting for the abscess to mature causes undue necrosis of tissue.

The cure of anal fistula depends upon correct surgical procedure, and fistulae which are not too extensive should be cured with one operation in ninety-five per cent of cases. Failure to heal a fistula is due to lack of proper surgical technic, injudicious packing, inadequate drainage, or improper post-operative care.

A radiating incision should be made under the direction of the finger in the anal canal, and free drainage established. Many surgeons prefer the cauterization method for operating tubercular fistulae, while others adhere to the usual surgical technic and use the scalpel. I prefer the cautery method in the belief that it retards the absorption of infection and prevents the possibility of activating the old tubercular process. The treatment of anal fistula by any method other than surgical is only a compromise. The many different preparations used for injecting the fistulous tract are only palliative, and are a waste of time and extra expense for the patient. Following the surgical procedure, efficient after care is essential for a satisfactory result.

#### ANAL FISSURE

Anal fissure is an ulcerous lesion situated usually in the posterior commissure, occasionally in the anterior commissure, and rarely on the lateral margins of the anus.

Trauma of some sort produces the original abrasion in fissure, but ulceration does not occur in a healthy anus. Definite pre-existing anal or rectal disease must be admitted as an underlying factor. External trauma, caused by the careless introduction of rectal suppositories or enema syringe tips, may promptly develop anal fissures. Internal trauma may result from sudden over-distention of the anus, unskillful instrumentation, or tearing of the anal mucosa during prostatic massage.

In patients who are found to have fissure, there often will be a history of long-standing digestive difficulties which finally involved the pelvic bowel. In the rectum, mucus and serous exudate accumulates, the sphincters become irritated and spastic, and the way is prepared for ulcers, abscesses, fistulae, and neoplasms. In the location of frequent occurrence of fissure, the posterior and anterior commissure, will be found the valves of Morgagni, in the recesses of which fecal material easily accumulates and distends the pocket until the valve projects out into the anal lumen where it is torn by a passing hard fecal mass. A large papilla is nearly always present at the inner angle. A tear caused by passage of a hard mass of feces will often give rise to a crack or fissure in the skin similar to the little cracks commonly seen around the finger nails.

Small polypi or hypertrophied anal papillae, if situated so that they prolapse into the grip of the external sphincter, will give rise to a fissure

through the irritation they set up. In such cases, the fissure is exposed beneath the polyp when the polyp is lifted up, and the fissure will not clear up until the polyp is removed.

Multiple fissures, when they occur, may be found anywhere about the anus and may be syphilitic or gonorrhreal in nature. They often are associated with condylomas about the anus and perineum, when syphilitic. The anal tissues are discolored with evidence of infection. The anal ulcer usually is found with a sentinel tag externally and a hypertrophied papilla internally.

On digital examination, in an anus where there has been long-standing infection with alternate healing and breaking down of the fissure, there is imparted the "feel" of a ring of bone around the examining finger. The constant sphincter defense is replaced or reinforced by an increase in fibrous tissue.

Abscesses may occur in association with fissures and from these fistulous tracts may develop. The sinuses appear to originate in the ulcer, and frequently surround the anus subcutaneously.

Treatment for fissure through divulsion of the anus has been found satisfactory, but the rationality of its usage is doubtful, especially when it is considered that fissures are varicose ulcers and entitled to careful treatment. Divulsion is supposed to incapacitate the sphincters, permitting the fissure to heal through rest of the anal canal. Excision of the fissure and severance of the outer half of the corresponding portion of the external sphincter is satisfactory treatment, where muscle spasticity and hypertrophy are very noticeable. The local application of strong chemicals and cauterizing agents and other nonsurgical methods of treatment fail to produce permanent relief when existing over a period of time. However, the use of quinine urea hydro-chloride and diothane, or some

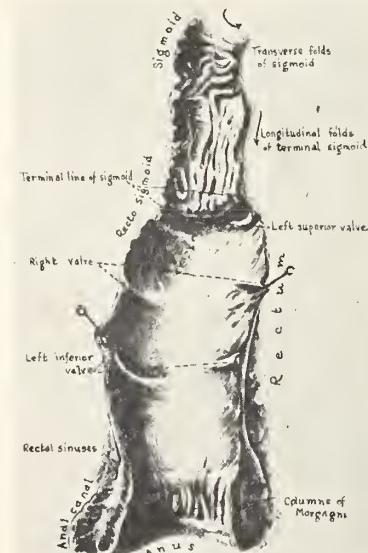


Fig. 3. Terminal sigmoid, rectum and anal canal.

other preparation having a prolonged anesthetic effect, is very helpful in recent fissure without sphincter spasm.

#### CANCER

Cancer of the rectum presents a simple and easy diagnostic problem, since the lesion is both readily palpable and visualized. Rectal cancer may be palpated with the finger and visualized with the aid of the proctoscope.

There is a general impression among the laity that rectal carcinoma is painful, which is not true, for when the patient begins to notice pain, the disease has developed so far that radical removal seldom is successful.

A large percentage (90%) of the carcinomas of the rectum can be felt on digital examination. Any nonpedunculated mass having a hard nodular feeling is likely to be malignant and should be considered malignant until proved otherwise. If seen in a reasonably early stage, rectal cancers offer a good chance of permanent cure. Our only hope of reducing the mortality of rectal carcinoma lies in early diagnosis.

Digital examination is important but not conclusive. Any one who has palpated carcinomatous tissue knows the "feel" of cancer. The finger is invaluable in determining fixation and the presence of enlarged nodes. The appearance of cancer through the proctoscope should seldom confuse the examiner. Cancer practically always occurs as a single lesion which appears as a more or less irregular, warty, stubby nodular or cauliflower-like growth in the mucosa, projecting into, or possibly encircling the lumen of the bowel. Cancer usually appears on the posterior wall and gradually encircles the bowel within twelve to eighteen months. Pain does not occur until the disease has invaded the bowel wall and the deeper structures become involved. Cancer may appear as an excavating process on the wall depending upon the extent of growth and trauma. The sharp line of demarcation between the proliferating mass and the adjacent mucosa is distinctive. Biopsy is a conclusive means of diagnosis and should be made if there is any question.

Approximately five per cent of all cases of cancer are cancer of the rectum.

In a person past forty years of age, at the first sign of bleeding from the rectum, examination should be made. Bleeding in connection with increasing constipation form the two earliest signs of cancer. These may be present for a period of six to ten months before the individual begins to complain of very much distress. In ninety per cent of cases, a rectal cancer is in close relation with the recto-sigmoid juncture, and this can be easily diagnosed by inserting the gloved finger in the anal canal and pressing the finger upward, as far as the finger will reach. The other ten per cent can be diagnosed by use of the sigmoidoscope, perhaps x-ray. Cancer is a slow growth; depending upon the type of cancer, it requires from twelve

to twenty months before marked signs of obstruction and pain are shown.

Rectal cancer, untreated, has a one hundred per cent mortality, and accounts for five per cent of the total cancer deaths.

Treatment of rectal cancer consists of early, radical, well-executed surgery, and radium as indicated. Bowing and Fricke<sup>4</sup> recommend the use of radium as preoperative treatment. Recently Strauss of Chicago has employed treatment by electrocoagulation.

#### CRYPTITIS

The semilunar folds formed between the lower end of the columns of Morgagni are called the crypts of Morgagni and inflammation of these crypts frequently causes pruritis ani and allied anal irritation. As a result of the chemical irritation from repeated laxatives or enemas, the crypts of Morgagni are irritated and prepared to accept infection. Infection from a crypt may extend beneath the anal skin and weaken it so that overstretching will cause a tear and resulting fissure. Healing will not be permanent until the infected crypt is removed, because it is secondary to the infection in the crypt. Papillae are so closely associated with the crypts that their involvement is to be expected.

On examination through the anoscope, one can identify these crypts. Often pus can be demonstrated in the crypts, and not infrequently a sinus or a blind internal fistula will be found leading from a diseased crypt. Cryptitis is a cause of a majority of the lesions of the anus, and is the cause of approximately ninety-five per cent of fistulæ.

The crypts are large and are more numerous and of greater capacity than tonsillar crypts. Because the openings or mouths of the crypts are directed upward in a direction opposed to the fecal current, it is easy to see that irritating particles are forced into the crypts during the expulsion of fecal matter. This foreign material may act as an irritant and cause ulceration followed by suppuration and absorption. This is a fertile source of infection, and is one of the most frequently overlooked sources present in the human body. The anoscopic examination in this regard will reward the general practitioner many times through the discovery that an anal cryptitis or peri-anal sinus is the source of infection that has produced symptoms in other parts of the body.

Treatment consists of eradication of the crypts by cauterization or cryptectomy. Some may respond to correction of the intestinal function and administration of autogenous vaccine, or direct application of a mild solution of silver nitrate through the anoscope. A great many patients who have chronic symptoms as a result of the focal infection in a crypt will require both the surgical removal

<sup>4</sup> Bowing, H. H.; Fricke, Robert E.: Preoperative Radium Treatment of Rectal Carcinoma. Collected Papers of the Mayo Clinic and Mayo Foundation. Vol. xxvii, 1936, p. 1022. W. B. Saunders, Philadelphia.

of infected crypts and a period of autogenous vaccine therapy.

#### PRURITIS

In pruritis, there is a sensation of itching which is the predominant feature. Nothing affords very much relief. Scratching increases the torture and breaks in the surface of the skin may follow. The skin about the anal orifice has a red and sometimes a rather blistered appearance, with acutely hypersensitive tissues. In cases of long standing, the skin becomes thick and leathery with deep creases.

Pruritis may be caused by constipation, diarrhea, dietary peculiarities, food allergy, exposure to parasites, personal habits, foci of infection, cryptitis, papillitis, hemorrhoids, mucous colitis, fistula, fissure, and even "athlete's foot." The general examination should be exhaustive, and attention should be given to the mouth, teeth, tonsils, prostate gland, uterine cervix, and other possible foci of infection. It sometimes is found that the patient has some visceral disturbance, and after removal of the gall-bladder or appendix, the disease disappears, but such treatment should not be undertaken merely because a patient has anal pruritis, unless there is some definite evidence that there is a connection between them.

The intractable nature of anal pruritis is proved through the numerous remedies offered for its relief. Most forms of treatment prove to be disappointing. Roentgen rays, radium, ultraviolet light, quartz light, etc., have been used with varying degrees of success, but usually the relief has been only temporary. Injections of benacol or hydrochloric acid have been tried and innumerable ointments and palliative measures have been used, sometimes successfully, sometimes with no good results. The hydrochloric acid treatment consists of injection of a dilute solution (1-3,000) of the acid into the loose tissues under the anal margins and around the rectal wall, far up into the pelvis. Benacol is sometimes injected under the skin of the affected region.

Another method of treatment is ionization, which gives relief to some patients; however, this method has been for the most part discarded.

Stone, of Johns Hopkins, popularized the use of alcohol which is injected about the affected region until all the diseased tissues are treated in this way.

If hemorrhoids, fissure, fistula or similar conditions are associated with pruritis, they should be eliminated first. Relief may be obtained through this treatment alone. A satisfactory treatment in most cases is the injection of forty per cent alcohol beneath the itching surfaces. In some instances, the itching will stop immediately following the injection, and does not return. Sometimes it is necessary to repeat the treatment. Postoperative care is essential to avoid sloughing.

Favorable results have been reported from all of these treatments, and all seem to have the same purpose, that of destroying the nerve filaments supplying the sensitive skin.

311 HUME MANSUR BLDG.

## UNILATERAL DEAFNESS AS A SEQUEL TO NON-FATAL LIGHTNING TRAUMA

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Riley, Indiana

A review of the present day literature and knowledge of the effect of lightning trauma on the human reveals that our data is incomparable with the knowledge possessed on other types of traumatic injury. There is a paucity of clinical reports on the subject and the cases reported all differ in their symptomatology and residual effects. Moreover, almost all cases reported are by European authors. The scarcity of case reports is readily understood when it is recalled that cases of non-fatal lightning trauma are very rare.

#### CASE REPORT

Mrs. H., white female, age 63 years, was struck by lightning on May 2, 1936, at 7:00 a. m., while she was at work in her kitchen. Her son reports that he was working on his automobile and the bolt of lightning struck his car, knocking him up in the air without injury. The lightning blew out a hole in the roof and ripped off the door casing. It also destroyed an adjacent chicken house.

Mrs. H. was rendered unconscious for about five minutes. Her left shoe was ripped completely off her foot.

Physical examination revealed an emaciated white female, apparent age 65. The left cheek was badly swollen and blood was seeping from the left ear. The left eyebrow and lashes were singed off. The entire anterior aspect of the chest was burned superficially. The burns were present over both breasts and in spots vesicles were present. The abdomen bore a burned streak about two inches wide on its left lateral aspect. The burn on her left lower extremity was more pronounced. Be-



Fig. 1. Burned streak on breasts and abdomen.



*Fig. 2. Burned streak on left leg.*

ginning from the left anterior superior iliac spine, there was a zig-zag line of burn about two inches wide and sharply demarcated. The hue was a very dark red. The zig-zag line curved under the calf and extended to the medial aspect of the plantar surface of the left foot. At this point there was a slit-like laceration about one inch long around which was an area of erythema three inches in diameter. Eyes reacted normally to light and accommodation. Right ear was normal. Left ear canal was bleeding freely, obscuring vision of drum. Test by watch-tick revealed total deafness. Temperature: 98-64-16. Blood pressure: 120/60. Pharynx normal. Neck essentially negative. Lungs clear throughout. Cardiac sounds apparently normal. All reflexes were intact and normal. Patient appeared mentally normal and wanted to resume her housework. No paralysis existed.

On May 5th the left ear canal had ceased bleeding. The drum was intact and very red, and the patient was totally deaf in her left ear. Hearing in the right ear was normal. The appearance of the burns was unchanged except for formation of a few more vesicles. These burns were not painful. The appearance of the burn of the left lower extremity resembled the zig-zag lightning streak seen in the sky. The patient was able to walk around and felt all right. Apparently, the burns bore no indication of a slough. Treatment consisted of glycerin drops in the left ear, calamine lotion to the burned areas and the laceration on the left foot sole, and bromides by mouth.

On May 12th patient was doing her housework. Temperature: 98-72-16. Blood pressure: 118/60. The areas of burns were sealing with no sloughs. The left ear was totally deaf. The ear drum was red. Wax was beginning to form in the ear canal. Apparently, her only residue was total deafness of the left ear.

#### COMMENTS

This case is unusually interesting because:

- (1) It is almost inconceivable that survival followed an electrical discharge operating at a potential of thousands of millions of volts traveling from the point of entry (left ear) to its exit (left foot).
- (2) The left total deafness must have its etiology in a damaged eighth cranial nerve.
- (3) There was no slough of tissues.
- (4) Left deafness was the only residue.

## REMINISCENCES

FRED MCK. RUBY, M.D.\*  
Union City, Indiana

As one of the older members of this society, as well as the son of a physician, it has been my privilege during the last fifty years (thirty-one has been in my own practice) to have the pleasure, and sometimes pain, of noting many changes in the way in which we practice our profession.

In 1905, as the boy member of this society, I drove a horse and buggy. Many times have I known my father to be gone from home three days and nights during a typhoid fever epidemic; he was never over nine miles from his office, but could not take the time nor the energy to come home for a few hours.

Medical society meetings were attended only by considerable effort by those of us living elsewhere in the county. Many times have I gone to Winchester on the traction car. We came when the car came and we went when the car went. Our only choice was limited to the time tables.

Then came the automobile. Surely attendance should increase as transportation was easier and more considerate. Also speakers were more easily obtained. It would interest you younger men to have driven over with the two Doctors Reynard and my father with me in my closed car. Many weighty subjects were settled in that car. You, too, would have laughed when Dr. Granville Reynard emptied his mouth of the accumulated tobacco and saliva through a car window, only to find that the window was closed! Also it would have interested you younger men about the time of the great War to find Dr. Reid arriving at the meetings and using a paid driver. Those of you practicing today do not appreciate what driving a car really meant to a fellow in those days.

#### SECTS

In 1905 we physicians were a "holier than thou" sect. By that I mean we allopaths had a religious, yes, a fanatical hatred of the homeopaths, then the eclectics and finally the osteopaths. Strenuously we fought every effort on their part to grow, with varying results. But when we assumed the attitude of the Chinese toward invaders, we assimilated them quickly, and they have now become mere memories.

I mention the above merely as a hint as to future cults and legislation to control or combat them.

#### GERMS VS. PATIENTS

About 1905 the general practice of medicine tended to go on the rocks except in the medical centers. This was largely because the germ theory was developed and we felt that the patient was only an interested by-stander in our fight to rid him of the offending organism. However, as the patient was sick, he was not interested in our

\* President's address delivered before the Randolph County Medical Society, Jan. 13, 1936.

working on the germs. He wanted us to work on him. The failure to recognize this elemental psychological fact resulted in the appearance of chiropractors, naturopaths, Christian Scientists and new thought followers who treated the patient and left the germs to die of neglect—sometimes.

#### OUTSIDE "INTERNSHIP"

Again lack of hospital facilities caused most of us to get our internship after we had established an office. Only some twenty to twenty-five per cent of the graduating classes could be placed in hospitals. Those were the days when the poor folks of our community supplied us with the material now found in the charity hospitals.

Now with the hospital internship universal and with our present system of relief the young physician seems more assured of an income from the start than we did after several months.

#### COMPENSATION AND FINANCES

In 1905 injured men in a majority of cases were cared for with about as much business sense as we now care for auto injuries; that is, we operated and cared for these cases at our own risk. Now, thanks to compensation and thanks to the so-called Morris Plan, operative cases should be fairly safe financially.

#### CONSULTATIONS

I fail to recall any physician of standing thirty years ago who would allow a patient to die. By that I mean any physician who allowed a patient of his, except when encountering sudden death—to die without employing what was termed "counsel" was termed unsafe.

The consultation was frequently among physicians of the immediate community although some of the physicians in charge of the cases always left a feeling with the patient that if they did not know what the trouble was, or rather what to do, they would have to go to Indianapolis, Dayton or Cincinnati to find any one who knew more. And while these men worked largely without the cocksureness of the modern practitioner, who has his x-ray, blood chemistry and cardiograph, I am not at all sure but what our patient had at least a more comfortable end.

#### BLIND AND OLD AGE PENSIONS

In addition to the poor folks who furnished our early practice there was also a considerable number of people who in spite of the unscientific treatment of the early physician managed to survive to a ripe old age. These people were some trouble for us as they were a burden upon the younger generation and required both doctoring and nursing. How times do change! Soon we will be asked to keep the old folks alive so that we may all live on them rather than them on us!

Again at the increase of civilization the slight decrease in the number of blind people was not enough to relieve the above situation. Today we find the blind of our state receiving \$1.00 per day which surely will help a great deal.

Personally the author is reasonably astounded to find that the eligibility of these blind folks to state relief depends upon an examination by a physician trained in ophthalmology.

#### RELIEF

Again lack of hospital facilities caused them to be used only by the wealthy and the very poor in the city. Today when our youngsters decide to get married they are assured that their first baby will be born in the hospital at the expense of the county or of the community.

Seriously, however, there are many things to make some of us wish for the good old days, for in those days we had: first, a reverence for our profession which is not found today; second, a respect for sickness of itself; third, sympathy for the patient and his family; fourth, a sense of community responsibility which we would try to live up to.

What we did not have was: first, breadth of activity; second, a widened area of contacts; third, two-hour access to a medical school second to none.

#### OPTOMETRISTS VS. OPHTHALMOLOGISTS

The following definition was not written by a physician but is a decision in a court of law and is given you as an accurate statement of conditions today:

"Oculists and ophthalmologists belong to a distinctive class from optometrists. The first has relation to the practice of the medicine and surgery in the treatment of diseases of the eye, and the second to the measurement of—fitting of glasses to—the eye. This court thinks that the distinction is quite generally understood, the one being recognized as a learned profession, and the other as an occupation or vocation calling for a degree of mechanical skill and experience. (Saunders v. Swann et al. (Tenn.), 292 S. W. R. 458)."

My reason for introducing this definition is because of three cases of the last two years:

First: T. H., girl, was refracted by an optometrist because of squint. He did his work well; he gave a +1.00 sphere on each eye where she should have had a +7.00 on one and a +8.00 on the other eye.

Second: The late I. B., of Farmland, who went to his "good friend" in Muncie for glasses and paid more for them than I have ever received in this state. On returning in two weeks he complained of poor results. His "good friend" exclaimed, "Why, my good man, you have cataracts!" He kept the \$28 fee for glasses.

Third and last: A boy, 14 years old, had traumatic cataract of the right eye together with a scar in the cornea below and with adhesion of the iris to the capsule of the opaque lens. This boy was hit in the eye by a nail head and had to wear a bandage to the state fair. The mother says that she was working for an optometrist in our city and he said that he thought she was doing all that was necessary. She was using boracic acid in the day time and yellow oxide ointment at night.

## CONTRACT PRACTICE

Recently it has been my privilege to see contract practice at its best. I will take no time except to enumerate the features of this practice which might appeal to us all.

First: The physician is guaranteed a good income.

Second: He is guaranteed a vacation.

Third: Ambition is rewarded in yearly summaries with bonuses.

Fourth: The men at the head of the work compel the newer men to keep up to date.

Some of the disadvantages are:

First: Returns not accurately commensurate with work.

Second: A "staff" feeling in work rather than a "freedom of individuality."

Third: An appreciable loss of identity. Many patients go to the "Hospital" to get some medicine, not to the doctor.

Fourth: Compulsory association with men whom you do not care for, or who are "impossible."

Fifth: Tendency to feel that your work is "detail" work. During epidemics the C C pills and aspirin are bought in enormous quantities and "dished out" almost indiscriminately, as in the late war.

## CREED

Now, after having spent some time reviewing the past thirty years, I am going to give you my Medical Creed for 1936:

I shall do my best to render the best service to those who consult me, or are sent to me, to the end that they shall have intelligent care; I shall not attempt to spread my practice to the field of my confreres but stick to my own specialty, departing therefrom only when it is not feasible or impossible to secure intelligent cooperation from the family physician. I shall adhere to the golden rule in medicine, departing therefrom only where I find I am dealing, not with a fellow professional man but with an unscrupulous doctor, one who will use me for his own ends, one who is not a confrere, but a competitor, and an unscrupulous competitor. I shall continue to assert and believe that in our twenty members, the Randolph County Medical Society stands second to none of similar size in the entire country.

235 W. PEARL ST.

Are You Ready to  
Go to South Bend?  
Remember —  
October 6, 7, and 8!

## A SURVEY OF THE PUERPERAL DEATH RATE IN A TYPICAL INDIANA COUNTY\*

C. E. CANADAY, M.D.  
Newcastle

During the past three years the newspapers and lay magazines have presented to the public lurid tales of the unprecedented death rate among American mothers. Some of the women's magazines have been printing serial articles upon the subject; a national organization is being effected, supposedly for maternal welfare; state and national agencies are being importuned to "do something"—nobody knows exactly what.

The one thing upon which they all seem to agree is that the doctors are responsible for this condition which they propose to remedy by regulating and investigating the doctors and instructing them in the art of obstetrics.

To prove their contentions, they cite the supposedly marvelous record of certain model maternity projects, certain lying-in hospitals, and certain eminent obstetricians.

While this press campaign is being carried forward with a very superficial knowledge of the facts, the saddest part of all is that the doctors do not rise to defend themselves and to make public the facts regarding this important matter.

To begin with, in compiling vital statistics, deaths from all puerperal causes and for the entire period of gestation are grouped together and charged against the birthrate; whereas, only deliveries occurring after the beginning of the seventh month are recorded as births. In other words, all deaths incident to actual maternity, and all deaths incident to abortions, including the very large number of abortions that are induced in a wilful effort to avoid maternity, are charged as maternal deaths.

The model maternity projects, for the most part, deal only with actual maternity, so that when their comparatively low death rate is held up to the admiring gaze of the public, the general practitioner who must report deaths occurring from accidental miscarriages and induced abortions (most self-induced), in addition to a normal number of maternal deaths, is made to appear before

(\* Editor's Note: The figures as published in this paper are not in accordance with the figures as contained in the records of the Indiana State Board of Health. For the ten-year period, 1926 to 1935, the maternal death rate for Henry County is given by the Indiana State Board of Health as: 5.9; 6.0; 8.5; 1.6; 4.9; 6.2; 8.6; 6.0; 4.5; and 5.8.

In accordance with Census Bureau customs, these quoted rates begin with the year 1935 (5.9) and end with the year 1926 (5.8).

The variation may be occasioned by a different method of computing the rate, i.e., in a consideration of what rightfully should be included in the maternal death rate. Dr. Canaday says that he has no desire to criticize either statisticians or physicians, but believes that physicians are being misrepresented insofar as the maternal death rate and the physician's connection with it are concerned.)

## PUERPERAL DEATHS IN HENRY COUNTY, INDIANA, FOR 54 YEARS

DEATHS FROM ALL PUEPERAL CAUSES  
33,096 BIRTHS — 80 DEATHS  
RATE 2.5 PLUS

	Total	Sepsis	Eclampsia	Cardiac	Mania	Hemorrhage	Operation	Cesarean	Causes In-completely Stated
1882	0								
1883	2	2							
1884	0								
1885	4	2			1				
1886	3	2	1						
1887	0								
1888	1		1						
1889	4	4							
1890	2	2							
1891	0								
1892	2		1						
1893	2	2							
1894	2	2							
1895	0								
1896	0								
1897	4	1	1		1				
1898	2	2							
1899	1	1							
1900	2	2							
1901	6	1	5						
1902	2		2						
1903	1	1							
1904	2	2							
1905	2	1	1						
1906	4		4						
1907	1	1							
1908	1			1					
1909	0								
1910	4	4							
1911	0								
1912	1	1							
1913	4	1	1	1					
1914	0								
1915	2	2							
1916	0								
1917	1	1							
1918	1	1							
1919	2	2							
1920	1	1							
1921	1			1					
1922	0								
1923	2				2				
1924	0								
1925	2	1							
1926	0								
1927	0								
1928	0								
1929	2	1							
1930	1	1							
1931	2	1		1					
1932	2	1	1						
1933	1	1							
1934	0								
1935	1	1							
Totals	80	48	19	3	2	2	1	5	

20 Years — 13,063 Births — 8 Deaths — Rate 0.63

20 Years — 10,163 Births — 19 Deaths — Rate 1.9

MATERNAL DEATHS — THOSE CONNECTED WITH  
DELIVERY AFTER SIXTH MONTH  
33,096 BIRTHS — 39 DEATHS — RATE 1.2

	Total	Sepsis	Eclampsia	Cardiac	Mania	Hemorrhage	Operation	Cesarean	Causes In-completely Stated
	0	0	0						
1	0	0	0						
2	0	0	0						
3	1	1							
4	4		1						
5	1	1							
6	0	0	0						
7	0	0	0						
8	0	0	0						
9	0	0	0						
10	0	0	0						
11	1	1							
12	2		2						
13	1	1							
14	1	1							
15	0	0	0						
16	2	2							
17	0	0	0						
18	0	0	0						
19	0	0	0						
20	0	0	0						
21	0	0	0						
22	0	0	0						
23	0	0	0						
24	0	0	0						
25	0	0	0						
26	0	0	0						
27	0	0	0						
28	0	0	0						
29	0	0	0						
30	0	0	0						
31	1	1							
32	1	1	1						
33	0	0	0						
34	0	0	0						
35	1	1							

20 Years — 10,163 Births — 19 Deaths — Rate 1.9

20 Years — 13,063 Births — 8 Deaths — Rate 0.63

the world as a killer of women. All of this is misleading to the public. It is totally unfair to the doctor, because it places him in a false light before his community after he has served it well under unfavorable conditions, which conditions could not be changed in a moment; and neither government commissions nor self-appointed committees can render to the community the same service rendered by this family doctor.

Doctors will not only be defending their own good names, but will be rendering a public service if they demand that the truth be known in regard to America's so-called maternal death rate.

Henry County, in which this survey was made, may be taken as a typical community for the following reasons: It is located in the middle third of Indiana; its people are native American-born (the number of Negroes and foreign-born is almost nil); it has a population of approximately 37,000—about half urban and half rural—its people are about equally dependent upon industry and agriculture; midwife practice is practically unknown—physicians have rendered the obstetric service; the general death rate and birth rate are near the general average for the country.

Birth and death records were opened in Henry County, as directed by law, January 1, 1882, and since that date, a period of 54 years, the doctors have recorded 33,096 births.

Ninety-nine and a half per cent (99½%) of these deliveries were conducted in homes, some were good homes with all the comforts, some were poor homes with few comforts, and some were mere hovels with no comforts and few of the necessities. During the first years of this period, asepsis was unknown and the prenatal care of women was given scant consideration. During the latter years of the period, doctors have improvised asepsis so far as they could, and probably one-fifth of the women have received some prenatal care. The lack of prenatal care is not the fault of the doctors, for its advantages have been urged upon their patients.

Details will be found in the accompanying chart. The principal facts which become evident from this study may be summarized as follows:

The number of deaths from all puerperal causes was 80—or 2.5 deaths for each 1,000 births during the full 54 years.

The first twenty years of the 54-year period showed 37 deaths in 10,163 births—a rate of 3.8 deaths per 1,000 births.

The last 20 years of the 54-year period shows 13,096 births with 19 deaths from puerperal causes—a rate of 1.54 deaths per 1,000 births, which was less than half the rate of the first 20 years.

Considering the various causes of puerperal deaths, we find that sepsis in some form was responsible for 48 of the 80 deaths: this includes eight who developed acute infectious disease during the course of their pregnancy; two, influenza; two, pneumonia; two, typhoid; one, measles, and one,

erysipelas. During these diseases they aborted, developed puerperal sepsis, and died.

Eclampsia caused 19 deaths, ten of this number occurring prior to the seventh month of pregnancy. Cardiac embolism caused three deaths, all of them being full-time deliveries and two of them twin births.

Post partum hemorrhage—so dreaded by the laity—did not rank very high as a cause of death, being responsible for only two deaths in more than 33,000 births.

Puerperal mania was responsible for two, and in five cases the cause of death was incompletely stated, merely saying "childbirth" or "abortion." One death followed cesarean section.

The year 1901, which marked the highest death rate of the entire period, was of unusual interest. Five of the six deaths recorded in that year were due to eclampsia; five of the six were full-time deliveries; two deaths occurring the following year were due to eclampsia and occurred early in the year; thus the ten months from May, 1901, to March, 1902, seemed to witness an epidemic of eclampsia.

The youngest patient was aged sixteen and the oldest was 47; 15 of the 39 delivered at seven, eight, and nine months were primipara.

A study of the actual maternal deaths, i. e., deaths associated with births occurring after the end of the sixth month, shows the following:

For the entire 54-year period, 33,096 births with 39 deaths—rate, 1.2 deaths per 1,000 births.

For the first 20 years of the 54-year period, 10,163 births with 20 deaths—rate, 1.9 deaths per 1,000 births.

For the last 20 years of the 54-year period, 13,096 births with 8 deaths—rate, 0.63 deaths per 1,000 births.

The magazine *Time* for May 25, 1936, extolls the work of one of America's leading obstetricians and the lying-in hospital which he directs, saying: "2,881 babies were born there last year with a loss of only 15 mothers." This was a death rate of 5.3 deaths per 1,000 births. Now, it just happens that 5.3 per 1,000 was exactly the death rate from all puerperal causes in the whole state of Indiana for the year 1934, and for the year 1935 Indiana's rate was 4.9 per 1,000.

Indiana, like most other states, has never separated the actual maternal death rate from the gross puerperal rate, but this survey of a representative county indicates that only about one-half of the deaths due to puerperal causes are associated with actual births.

Compare these figures, bearing in mind that the model maternity projects (all very commendable in themselves), deal with births—not abortions.

If the magazines, authors, and others who are interesting themselves in this matter can be induced to bend their energies toward eliminating the abortion occurrence rate, they will be rendering a great service.

# THE JOURNAL

OF THE

INDIANA STATE MEDICAL ASSOCIATION  
DEVOTED TO THE INTERESTS OF THE MEDICAL  
PROFESSION OF INDIANA

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OCTOBER, 1936

## EDITORIALS

## OUR PRESIDENT

Roscoe Lloyd Senenich was Hoosier born at Wakarusa, November 20, 1882. His father was a physician, a graduate of Rush Medical College, so it was natural that the son, planning to continue the family professional career, entered that medical school after graduating from his local high school and the University of Chicago. He received his medical degree in June of 1905 and interned at the Presbyterian and St. Joseph hospitals in Chicago. For some time he was an assistant to the late Nicholas Senn, long-time leader in the field of surgery. After this period, Dr. Senenich located in South Bend where he has continued his work, limiting his practice to internal medicine.

Dr. Senenich married Miss Helen Daugherty, the daughter of Dr. Charles A. Daugherty, who was a past-president of our State Association and, at the time of his death, a trustee of the American Medical Association. To them was born a daughter, Helene, now a student at Vassar.

In the World War, Dr. Senenich served as a major in the medical corps, as chief of the medical service in general and base hospitals.

A member of many medical societies, he has served as delegate to the American Medical Association for several years and during that time he has made an enviable reputation as a member and secretary of the Committee on Legislative Activities. In this connection he has been generously quoted as an authority on the subject by the medical press of the country.

Dr. Senenich is a staff member of both hos-

pitals in South Bend, and has found time to serve for years as a member of the board of managers of the St. Joseph County Hospital, and as president of the South Bend Medical Laboratory. He also is president of the Morris Plan Bank and of the State Association of Loan and Investment Companies.

Early in his medical career, Dr. Senenich was imbued with the notion that medical organization was of prime importance and at once he identified himself with his local medical society. In a short time he came to be regarded as a more than ordinary asset to organized medicine, hence it was no time until officials of the State Association began to name him on various committees. His services are too well known for extended comment at this time. In the natural course of events (the Indiana State Medical Association has long been known to reward its workers!), Dr. Senenich became president-elect of our organization, and it was due to the untimely death of our president, Dr. Walter J. Leach, that Dr. Senenich took over the duties of his office several months ahead of time.

An indefatigable worker and possessed of the ability and personality that go to make a good executive officer, "Ross" Senenich made good at the start as his many friends knew he would. The economic affairs of the profession engaged much of his attention, and his deep study of the problems is evidenced by his accomplishments. Few of our presidents have given so unstintingly of their time, and few have had more mileage to their credit, for he took the job in a serious vein and gave to it the best that was in him, which was "plenty."

Dr. Senenich's monthly talks with the Indiana medical profession have been of more than common interest, displaying a broad knowledge of local conditions in the field. His work in the House of Delegates of the American Medical Association is, we believe, his outstanding accomplishment; he has made most intimate contacts that augur well for Indiana medicine in years to come.

It has been an unusual pleasure to work with this man through these many years, and to write this little testimonial of his ability and his love for his profession. Medicine needs men of the type of Roscoe Lloyd Senenich, and we are mighty pleased that Indiana has presented such a man.

## PUBLIC HEALTH PROGRAMS

Our Bureau of Publicity long ago established definite, sensible rules regarding medical publicity and these rules have been accepted by our component county societies, much to the satisfaction of all concerned. However, there is another problem in this connection, one that should have the attention of the proper committee, probably our Bureau, and that is health propaganda, especially

that sent out by our local boards of health. Some time ago we made favorable comment on such publicity sent out by the Fort Wayne Board of Health. The material used was up to the minute, the advice given was in accord with present-day knowledge, yet there was nothing about the articles printed that would indicate their source other than the fact that they came from the board of health. In our opinion, too many of our health officers capitalize on their positions; too commonly do their announcements assume a personal flavor. Such articles would be just as effective if they carried the information that the local board of health had sponsored them.

In this connection, it might be mentioned that too often do health programs appear in some of our communities, sponsored solely by the local health officer. In one of our larger counties this matter recently demanded the attention of the local county medical society, when the county health officer decided to put on a health campaign in connection with the county fair. Among the projects in the plan was one concerning the prevention of accidents of a certain sort. The health officer, instead of consulting the local medical society, asked a single member thereof to prepare such an exhibit. Looking about for material, this man sought help from the American Medical Association only to be advised that such assistance would gladly be given if *the county medical society gave its approval*.

A recent number of the Bulletin of the State Division of Public Health states that such programs should be under the direction of the local medical society and that the Division will assist in only those programs which have the approval of the local medical group. This is as it should be and if such programs are carried out with this in mind, there will be little or no occasion for controversy. It should be borne in mind that but a few years ago the Indiana State Board of Health was justly criticised for its lack of cooperation with the medical profession of the state. We thoroughly believe in health propaganda of the proper sort; at the same time we believe such propaganda should come from the local medical society, not from individuals.

## COMPARE THE DRIVER WITH THE PILOT

If the Navy is the first line of defense of our nation, the medical examiners are the first line of defense of the Bureau of Air Commerce and the flying corps of the Army, Navy, and Marine corps.

In the early days it was thought that any person who was able to sit in a plane was able to fly it, just as now any person is allowed to drive an automobile if he is sixteen years old.

At the present time, although it is not too

difficult to obtain a private aircraft pilot's license, the transport pilot and service flyers no doubt present a combination of physical and temperamental fitness and stability unequalled by any other group of human beings. They represent a line of germ cells most nearly portraying the normal. Examiners for the Army and Navy flying corps are medical officers designated as flight surgeons, and for the Bureau of Air Commerce they are appointed by the President. The opinions of such examiners are final. They are not coerced by the individual, relatives, or politicians to change recommendations.

The commercial carriers want pilots who will not, through physical or mental disabilities, add any risks to their equipment or pay loads. The services want men with proper physiques and temperaments who after the expense of training will be able to carry on for many years; they do not wish to risk their expensive equipment to those unfit. Neither branch wants to make "sky fodder" out of incompetents. An examination every six months or as often as is thought necessary keeps the examiners informed.

To begin with, the service flying-cadet must be a graduate of an accepted college or university. This assumes a certain intelligence at the start. The size and weight of a man is not of great importance in piloting a plane, but there must be a standard size cock-pit and instruments to which men must conform to a working degree. In general, the young man entering the service for training must be without physical defects. He cannot be accepted on the condition that these will be corrected. He can have no history of past serious illnesses such as tuberculosis, malaria, syphilis, chronic hay fever or asthma, nephritis, organic heart disease or paroxysmal tachycardia which might be brought on again by the strain of flying with its rapid changes in altitude and temperature and mental stress. The ears must be normal as to hearing and examination with the otoscope. Acute hearing will detect the first signs of error in motor performance. The equilibrium mechanism must function properly. The color sense must be perfect, for he must be able to tell color correctly to read signals without error under any condition of fog, smoke or fire. He must be able to tell correctly the color of the terrain beneath him. Night blindness must be ruled out. The heart is examined by determining its reaction to stress using the Schneider test. The young man must pass a satisfactory rebreather test. The eyes usually are the last to be examined. They must be normal without correction by glasses. Refraction is made with a cycloplegic to rule out errors of over one diopter. There can be no diplopia. Formation flying makes it necessary that there be no abnormality of esophoria and exophoria. The error of hyperphoria can be very slight. The depth perception must be correct within prescribed narrow limits.

The temperament is judged from the family history, the general appearance, and the reaction to the examination but especially by the behavior under flying instruction.

Physical and temperamental unfitness have been reduced to a minimum as a cause of aircraft accidents so far as commercial and service flying is concerned. These factors have been gone into in a sane and civilized way. Likewise, the pilot who "cracks up" because of drunkenness, disobedience to orders, or his own carelessness or foolishness does not get a chance to do it again.

This cannot be said to any sort of degree for automobile drivers. Why not classify all automobile accidents as to the physical and temperamental condition of the persons involved? After several hundred are counted, something of practical importance might be discovered as to what sort of persons should or should not drive a car. One could hardly expect help in this sort of a campaign from the automobile manufacturers. While they seriously try to make the machines more mechanically perfect, they must have people to sell them to. The insurance companies are taking it seriously for obvious reasons. The police department would seem to be the logical directors of such a campaign, with the aid of "drive surgeons" whose competence and integrity are not influenced by politics.

Inasmuch as the automobile is killing American people at the rate of about three thousand every month, it would seem worth the extra time to give a superficial examination to the prospective automobile driver when he applies for his driver's license, to rule out just the gross physical defects. Such perfection is not necessary or possible for the automobile driver as for the flyer, but the vision should be at least sufficient to read warning and stop signs; color blindness and night blindness could be discovered and information as to the hazard of these people driving be figured out; gross defects in depth perception could be found out and these persons warned against passing cars on busy highways at rapid speeds; gross diplopia could easily be found by the red glass test, and the hearing should be such as will enable recognition of a policeman's whistle, a fellow driver's horn in distress or the whistle of an approaching train. At least when an accident occurs the individual or those responsible should be studied to discover whether a disability exists that makes him or them more likely to cause accidents than other drivers who keep from having accidents.

Those 36,000 dead each year, and the many more thousands of invalids, deserve every possible form of investigation as to why they were exterminated or crippled.

MEET YOUR FRIENDS  
IN SOUTH BEND, OCT. 6, 7, AND 8!

## MEDICAL DIRECTORIES

Among the numerous bits of medical legislation enacted by the House of Delegates of the American Medical Association at the Kansas City session last May, one is outstanding: the endorsement of a resolution presented by the Arkansas Medical Society in regard to medical directories. That our members may be informed as to the nature of this resolution, we quote it:

WHEREAS, certain commercial interests are publishing medical directories, listing physicians by specialty and otherwise, as available for insurance and compensation work, and other professional services, and

WHEREAS, participation by listing in these lay publications merely serves for the profit of the promoters, and is furthermore technically indirect solicitation of patients,

THEREFORE BE IT RESOLVED, That the Arkansas Medical Society condemns these practices as unethical and forbids its members to continue listing their names in such directories, and

BE IT FURTHER RESOLVED, That the Arkansas Medical Society requests the House of Delegates of the American Medical Association to take similar action.

It has been said that "of the making of books there is no end"; we had supposed that with the advent of the medical directory issued by our parent organization there would be an end to the numerous medical directories that flooded the country some few years ago, but it is apparent that, even though there was for years a lull in the issuing of these volumes, the profitable racket has been resurrected and today we have numerous evidences of the gullibility of our profession.

The purpose of a directory is to disseminate accurate, worth-while information based on accurate data, regardless of monetary considerations. Well do we remember the first medical directory that came to our notice after graduation. Issued by a reliable firm which continues to occupy a special niche in the field of publication, it nevertheless was a pay-as-you-enter proposition; by that we mean that those who subscribed received special mention, while those who paid an additional amount received an extended listing. Yes, we must admit that once we fell for the game and even now have in our possession the copy that informed the inquiring world just how clever we were in the field of medicine.

Later came the "specialty" directories, books that undertook to inform the inquirer as to who was who in some particular field of medicine. We did subscribe for two copies of that book, but after a careful checkup as to certain individuals whom we personally knew, we decided to let bygones be bygones and thenceforth and forever eschew such expenditures. Along about that time came the American Medical Association Directory to which we have been a constant subscriber, and the lures and wiles of all others have been useless.

We have had much to say about "insurance directories," books that are said to gain lucrative appointments in the insurance field for those whose names are listed therein. The one in mind suggested a registration fee of some fifteen dollars. If our information is correct, and we believe it is,

Indiana doctors donated a sizable sum to these promoters. Ninety-two Arkansas doctors fell for their blandishments and it is reasonable to suppose that the more populous states did much better by them.

Insofar as medical "law" is concerned, the listing of one's name in such books is more than improper; it is a very unethical thing to do and we urge our members forthwith to sever their connections with all such projects.

We have made considerable investigation as to just how insurance appointments are made and find that invariably the routine is something like this: The American Medical Association Directory is first consulted and if John Doe, M.D., is listed in small light type (meaning that he is *not* a member of his county and state society), then John Doe, M.D., is considered as being out of the picture. If his name is carried in capital letters, then the *county society secretary* is consulted as to the present professional status of John Doe, M.D. True it is that other sources of information are consulted, but the fact remains that county and state society membership are the first requisites in the making of such appointments. Do not be misled; the medical directors of *all worth while* insurance companies are on their toes; they know what is what and they know that "special" directories, tinged and even enameled by the purely commercial spirit that gave them birth, are to be regarded with no consideration whatever.

So, if you are approached by one of these suave artists who so naively point out that by the expenditure of ten or more dollars you may be assured of a comfortable bit of vacation money, next summer, just close your ears to such proposals and save your money; it may come in handy, come next vacation time!

**PROGRAM!  
EXHIBITS!  
ENTERTAINMENT!**

**87TH ANNUAL SESSION  
INDIANA STATE MEDICAL ASSOCIATION**

**SOUTH BEND  
OCTOBER 6, 7, 8!**

### EDITORIAL NOTES

We are quite proud of THE JOURNAL for September, and have had numerous favorable comments on the magazine. By far the largest number of pages in the history of the publication, it carried an amazing news value to the Indiana profession. Much of this was made possible through the efforts of our friends in St. Joseph County who procured a sizable amount of local advertising. This again reminds us that JOURNAL advertisers make it possible for us to carry on in such a manner as we do, and we again urge our readers to patronize those who lend support to our publication.

The annual secretaries-editors conference will be held in Chicago, November 16 and 17, sponsored as usual by the American Medical Association. These conferences have come to be one of the most important group meetings of the parent organization. The attendance reaches the two hundred mark, and the two-day program offers an excellent opportunity for state secretaries and state journal editors to exchange opinions. One of the most interesting parts of the program is the round table gathering of medical editors, where those in charge of our state journals informally discuss their problems.

Committee reports as published in THE JOURNAL for September indicate a noticeable increase in the activity of the Association committees. Time was when most of the reports were of the perfunctory sort, if they were sent in at all, but not so in these days. We have just finished what amounts to a study of the reports and are willing to wager that no other state organization can show a more diversified activity among their standing and special committees. We are inclined to believe that much of the present improvement is due to the preponderance of younger members of the Association on the committees for the past year. Surely such reports as these augur well for the coming years.

Several years ago we made an arrangement whereby junior and senior students in the department of medicine of Indiana University could receive THE JOURNAL at a reduced rate. That such a step proved of value to those taking advantage of it is rather often evidenced by comments from those thus served. Recently a senior student was in the office and remarked that he deeply appreciated THE JOURNAL, going on to say that the

September number had arrived that day and, judging from its size, he was going to spend a most pleasant evening in going over it. We are of the opinion that we pay too little attention to our medical students, especially the upper classmen. Most of these young men plan to locate in Indiana, and it is they who will control the future destinies of medicine.

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The Orange County Medical Society will present an invitation to the Indiana State Medical Association to hold the 1937 meeting at the French Lick Springs Hotel. There is much merit in the contention that for two years southern Indiana members have had to make too long trips to the northern part of our state to attend our annual meetings; they believe they should have the pleasure of acting as host to the meeting in 1937. In times past there seemed to be an unwritten law that our meetings should be held first in one section of the state and then another, each third year or so in Indianapolis. In recent years the attendance has so increased that but few Indiana cities have sufficient accommodations. This objection, of course, does not apply to French Lick since all Association activities can be carried on under one roof there.

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Within the next two or three months, most county medical societies will hold their annual elections, an event that has come to be regarded as a serious business. The time long since has passed when it was deemed expedient to recognize some member solely because he was becoming of the emeritus type, or because he was generally regarded as a "good fellow." The medical profession continues to need medical society officers of the go-getting type, men who are willing to devote no little time to the job. Remember that the county medical society is the very backbone of organized medicine; without it there could be no concerted effort in any direction, and the practice of medicine would be in a sorry mess, indeed. See to it that your officers are chosen with the greatest deliberation, so that the magnificent work which has been done in Indiana during past years may be carried on and on.

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Each year we have occasion to congratulate the Indiana State Medical Association upon the work of one of its members, Dr. George Richardson, of Van Buren. So long ago that we have forgotten the date, this man was named as chairman of the necrology committee, which is a one-man committee. We do not know where he got his inspiration, but we do know that each succeeding year saw a

marked improvement in his annual report. His report of last year, we thought, had just about reached the ultimate and we said something to that effect in THE JOURNAL at the time. Now, however, we find ourselves at a loss for words to express the deserved appreciation for the enormous amount of work that Dr. Richardson has done in connection with the duties of his assignment. Little of an informative nature is omitted in his telling of those who have gone on, and there is much material for reflection in some of the details he has worked out. If you have not already read this report we urge you to get your September JOURNAL and give a few moments to a study of the report.

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A former judge of the United States District Court for Indiana made the pronouncement that the ambulatory treatment of narcotic addicts was an impossible thing and proceeded to hand out fines and jail sentences to Hoosier physicians who essayed such a program of treatment. In our time on the Indiana State Board of Medical Registration and Examination, several such instances occurred. *California and Western Medicine* for August, 1936, carries a complete report of the finding of Judge Yankwich, U. S. District Judge in California, in which he held a view opposite that of the former Indiana jurist. The physician on trial was charged with mishandling the prescribing of narcotics to an addict, a situation parallel to that in the Indiana cases. In a rather lengthy decision, he found the physician not guilty. While we do not care to enter upon a discussion of the merits of the ambulatory treatment of narcotic addicts, we would advise our folks to be chary of entering upon such a program, despite the decision of the California judge.

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A little more than thirty days hence, America will march to the polls to select the group which will carry on the affairs of government. While we are all individually concerned in the matter, since most of us have our political preferences, we should be a massed unit in one regard—that of the selection of those men and women who will make up our Indiana legislature for 1937. As we often have said, Indiana medicine has fared well during the past few years, but we must be on the alert now. It is true that the regimentation of medicine is not the acute problem that it was a little while ago, but numerous agencies are at work looking to some excuse for injecting such problems into legislative councils. If your local county society legislative committee has been seriously on the job, you have received or soon will receive from them a complete analysis of your local candidates. Give this analysis your careful attention; do not

be misled into voting for John Smith and Sarah Brown solely because you know them, for they may be your worst enemies, medically speaking. Hearken unto the voice of your local committeemen; they know their way around!

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Dealers who supply merchandise to physicians often have opportunities to supply medical merchandise to those who are not physicians, and some companies have no scruples about profiting on such transactions even when they know that there may be ultimate harm done to the public through such procedures. The highly ethical companies frequently refuse such opportunities for profit, and a recent example of this is the W. A. Baum Company which has consistently refused to fill large orders for Baumanometers to be used in such places as New York's Coney Island where blood-pressure reading devices have been installed and patrons are invited to read their own blood pressures at a cost of ten cents. Blood pressure readings taken by incompetent operators under such circumstances are of no value, and the misuse of such medico-scientific instruments is deplorable. A legal battle is being waged in New York over this particular procedure which is thought to be a violation of the State Medical Practice Act, and we shall be interested in the outcome.

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It is most gratifying to note the increase in membership in the Indiana State Medical Association these past few years. The lean years of 1932 and 1933 had us worried for a while, but 1934 came along with a better report, as did 1935. Now 1936 bids fair to show another increase, and it seems that our worries on that score are past, for the time being. Much of the credit for this must be given to the work of the Association officials and committees in publicising the attempts of a group of muckle-heads to foist governmental control of medicine upon us. We personally know of several instances in which doctors have voluntarily approached county society officials and asked to be enrolled so that they, too, might enter the fight. In spite of all this, there still are a few hundred Indiana physicians who should be in our membership, but for various reasons they remain outside the fold. In the annual report of the Executive Committee is the statement that the Indiana State Medical Association never has carried on a membership campaign. That is true, but we believe it is high time that such a campaign be opened. There are innumerable reasons why every reputable Hoosier physician should be on our rolls; few can offer one single, valid reason why they are not there.

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Dr. Max Bahr, superintendent of the Central State Hospital in Indianapolis, addressed the Mental Health conference of the Indiana Society for Mental Hygiene, and outlined the following four points in connection with "The Relations of Mental Hygiene to Delinquency":

1. That the disposition of all misdemeanants and felons be based upon study of the individual offender by properly qualified and impartial experts cooperating with the courts.
2. That such experts be appointed by the courts with provision for remuneration from public funds.
3. That prisoners be discharged or released upon parole only after complete and competent psychiatric examinations with findings favorable for successful rehabilitation.
4. That the incurably inadequate, incompetent and anti-social offenders be interned permanently, without regard to the particular offense committed.

Dr. Bahr's recommendations are based upon a psychiatric experience of many years, during which time he has been a close student of the subject in connection with criminals. Particularly do we agree with Dr. Bahr in his third point, for too little attention is paid by society to this phase of an ever-growing problem.

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If you have not already made your plans for attending the South Bend meeting, it probably is because you have failed to look over the program as published in the September JOURNAL. Better take another look at it since it appears to be just about the best program we have had in many years. Practically every field of medicine is covered and the guest list alone should command the attention of every physician. The lighter side of convention affairs has not been overlooked: the entertainment program is of such a varied character that every one in attendance will find some diversion to attract him, whether it be of the most dignified sort or that attended by the most utter abandon. The point is that in addition to a top notch scientific session, there will be plenty to do outside session hours. South Bend is one of our most interesting cities; her diversified industrial activities, her magnificent residential sections, a golf course that is a dream to behold, and a group of Association members who know their stuff when it comes to playing host, offer every inducement to be in South Bend, October 6, 7, and 8. Attending these annual conventions gets to be a habit; we've been doing it since we were a little shaver and look forward to each meeting with a feeling akin to that aroused within us, way back in our Wild Cat days, when circus posters were distributed in the neighborhood. If you have not made hotel reservations, do so at once. These

are all made through a local committee, which guarantees comfortable accommodations for all who attend. Take our advice: go to South Bend and participate in the biggest party in the history of the Indiana State Medical Association.

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A little while ago there appeared in the public press an announcement to the effect that a "fool-proof" cure for arthritis had been discovered by an eastern doctor. The announcement, apparently sponsored by the American Chemical Society, carried an indefinite something that aroused our interest, so we endeavored to locate the medical genius responsible for the discovery. He could not be found in the late issue of the American Medical Association's directory of physicians. As usual in such matters, we awaited the comment of Editor Morris Fishbein concerning the "discovery," and we did not have long to wait. The September twelfth number of *The Journal of the American Medical Association* carries as its leading editorial a characteristic denouement from Friend Fishbein. Ever alert to the interests of the profession which he so efficiently serves, Fishbein in no uncertain manner sets forth the truth concerning this alleged "cure." The "doctor" responsible for the announcement is of the Ph.D. variety, and is not a physician. His scare-head pronouncement to the lay press was made in advance of the meeting of the American Chemical Society. This same society was given opportunity to check up on the alleged discovery well in advance of the meeting, but for some unaccountable reason did not take advantage of the opportunity, and the paper was duly presented. Thus again we have a glaring example of rushing into print ahead of time, an example that too often is repeated in this country. Witness the publicity given a "cancer cure" presumed to have been discovered by some western physicians. "Premature announcement" is a tame expression for it, because immediately after the story was out, cancer victims all over the country began their useless journey to the Pacific coast. Just why such an organization as the American Chemical Society should sponsor such an announcement without first having investigated its medical aspects, and just how they will explain the muddle into which they have thrust themselves, remains to be seen.

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Dr. Thomas P. Murdock, in his address as retiring president of the Connecticut State Medical Society, chose as his theme the subject of medical expert testimony, a matter that has been of much concern to the medical profession for many years. He comments on the commonly discussed phases of the question, giving due attention to the popular belief that medical testimony is purchas-

able for either side of a medico-legal case. Dr. Murdock stresses a most important point, that expert medical testimony should be regarded as a specialty, not to be essayed by any and all members of the profession. He cites the fact that many physicians approach the witness stand in such matters grossly incompetent and wholly unprepared. We shall have to agree with him in this regard. He is strongly in favor of the "commission" system, whereby properly trained physicians and surgeons will take over this important branch of our work. The entire article is well worth reading by those interested in this subject. We have had much to say along these lines in past years, and the problem continues to be most acute. This is particularly true in matters coming before the Indiana Industrial Board. Too many physicians are making regular appearances before this body. Some physicians apparently like that sort of thing, to the extent that it is rather commonly bruted about that this or that physician is a "company" witness, meaning that his testimony is usually found to be favoring the employing company, rather than the claimant. A few years ago a specialist from an adjoining state made very frequent trips to Indiana, there to testify in industrial board cases, always favoring the defendant. In local circles it was predicted that his visits soon would become rare, which prediction long since has come true, due to the fact that he failed to put over his contentions. Some few years ago a medical acquaintance engaged in the study of law and was admitted to the Indiana bar; he told us that he did this in order that he might better qualify as an expert witness. Succeeding events failed to prove the wisdom of this venture, since he soon became a flat failure in every case in which he appeared. A number of states have provided for some form of a commission in these cases, notably Rhode Island, Michigan, Washington and Louisiana. Efforts are being made to bring about a similar situation in many other states. Indiana might well consider some such move.

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The following is quoted from an article entitled "Paradise Imagined," by William Henry Chamberlin, in the September issue of *The American Mercury*:

"Much is made of the socialized features of the worker's life in the Soviet Union, of the State medical aid, the rest homes, the number of workers at the opera and theater, etc. A good deal of valuable social work has been done in Russia, as in other countries, since the War; but when the benefits of the Russian workers are closely examined a good deal of the glamor tends to disappear. Take, for instance, the quality of socialized medicine. Here we have the interesting recent testimony of Mr. Edmund Wilson, whose writings characterize him as a definitely sympathetic ob-

server of the Soviet Union. During a trip to Russia, Mr. Wilson contracted scarlet fever and spent six weeks in a hospital in Odessa. It is not likely that Mr. Wilson, as a foreign vistor, was assigned to the worst hospital in the city, which is the third largest city in the Ukraine. His report on the sanitary conditions which he witnessed is, to put it mildly, unfavorable. The bathrooms were garbage piles. The hospital was infested with flies. The wash basin with running water was used for face-washing, dish-washing, gargling, and bedside purposes.

"Mr. Wilson's faith, however, was proof against this test. He adopted a method of interpretation which is sufficiently common to call for some analysis. From the deplorable condition of a Soviet hospital in 1935, he deduced how frightful Czarist Russia must have been before 1917. Somehow this suggests the explanation of the patriotic Hungarian hotelkeeper who, in response to a guest's complaint about unpleasant nocturnal insects in 1930, replied, 'Well, you know those dirty Roumanians occupied Budapest in 1919.'

"Czarist Russia certainly had plenty of sins to answer for. But the chances are that a detailed investigation of the Odessa hospital in question would reveal that its shortcomings today are attributable to such specifically Soviet causes as bureaucratic neglect and red tape, cold-shouldering of the trained medical personnel by self-assured Party members, and failure of the all-powerful State planners to allow adequately for medicines and sanitary appliances.

"Several personal experiences have led me to believe that, whatever may be said for the theory of socialized medicine, its practice in the Soviet Union leaves a good deal to be desired. Once when my wife was in Sochi, a Black Sea resort where malaria is rife, she asked in a drug store for quinine. She was told that the supply was so limited that it could only be sold to persons who already had contracted the disease . . . The servant of a friend broke her arm. She went to the clinic where she was entitled to free treatment and was sent away by a physician with the assurance that it was nothing serious. Only when her employer engaged a private physician did she receive proper treatment. It is noteworthy that anyone who can afford to patronize the experienced doctors and dentists who still maintain private practice almost invariably prefers to do so, instead of exercising his legal right to free treatment."

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Recently members of the Indiana State Medical Association received an announcement in regard to a hospitalization insurance "plan" furthered by L. B. McCracken, of Indianapolis. In order that no physician may have the idea that the Indiana State Medical Association has advocated or endorsed any plan for hospital insurance or group hospitalization, despite statements that have appeared in some newspapers concerning the Mc-

Cracken plan, the following excerpts from the minutes of the Executive Committee meeting held on June 20, 1936, are printed:

**"Group Hospitalization"**

"L. B. McCracken, manager of the Medical and Dental Service Bureau, appeared before the Committee and spoke of the difference between group hospitalization and hospital insurance. The Committee suggested that he prepare an article to appear soon in the Indiana State Medical JOURNAL explaining the difference between group hospitalization and hospital insurance as these terms are synonymous in the minds of most physicians." (This article appeared in the August issue of THE JOURNAL.)

From the minutes of the meeting of August 16, 1936, we quote:

**"Group Hospitalization"**

"Letter received from the manager of the Medical and Dental Business Bureau, Inc., of Indianapolis, (L. B. McCracken), brought to the attention of the Committee. The Committee appreciated receiving the information but it felt that it could take no action either approving or disapproving this matter in any respect."

In accord with the sentiment of the Committee the following letter was sent to Mr. McCracken:

"Your letter of August 15 was brought to the attention of the Executive Committee of the Indiana State Medical Association at its regular monthly meeting on August 16. The Committee wishes to thank you for keeping it informed in regard to this matter. It feels, however, that it can neither express its approval or disapproval of this matter in any respect."

Despite this letter the statement appeared in the papers throughout the state of September 15 and 16 that the McCracken "plan" was worked out with the co-operation of the Indiana State Medical Association. In order to correct this the following statement giving the position of the Executive Committee of the State Association was prepared for the Associated Press and appeared in the daily papers of the state on September 16 and 17 and is quoted in part:

"Dr. E. D. Clark, president-elect of the Indiana State Medical Association, today said the association has not approved a group hospitalization insurance plan announced Tuesday by the Medical and Dental Business Bureau of Indianapolis.

"L. B. McCracken, manager of the bureau, presented his plan to the Association in August, it was explained, but the Association wrote him a letter saying it could neither approve nor disapprove.

"Dr. Clark explained the state association has never cooperated or given its approval to any group plan for medical treatment or hospitalization."

**FORTY-SECOND ANNUAL CONFERENCE OF INDIANA HEALTH OFFICERS  
JEFFERSON PLAZA, SOUTH BEND, OCTOBER 5 and 6, 1936**

VERNE K. HARVEY, M.D., General Chairman



Reginald M. Atwater, M.D.



Verne K. Harvey, M.D.  
Director, Indiana Division of Public Health

**MONDAY, 9:30 A. M.**

1. Welcome. The Honorable G. W. Freyermuth, Mayor of South Bend.

2. Introductory Remarks, R. L. Sensenich, M.D., President, Indiana State Medical Association, South Bend, Indiana.

3. "The Public Health Program in South Bend," F. R. Nicholas Carter, M.D., Secretary, South Bend Board of Health.

4. "The New Emphasis in Public Health Nursing," Ruth Scott, R. N., Consultant, Bureau of Public Health Nursing, State Board of Health.

5. "Environment Sanitation," B. A. Poole, Chief, Bureau of Sanitary Engineering, State Board of Health.

6. "A Quality Program for Milk Products," John Taylor, Chief, Bureau of Dairy Products, State Board of Health.

7. "Laboratory Problems," C. G. Culbertson, M.D., Chief, Bureau of Bacteriology, State Board of Health.

**MONDAY, 2:00 P. M.**

1. "The Lake County Health Department," William D. Weis, M.D., Lake County Health Commissioner. Discussant, H. G. Cole, M.D., Secretary, Hammond Board of Health.

2. "Indiana's Maternal and Child Health Program," Howard B. Mettel, M.D., Chief, Bureau of Maternal and Child Health, State Board of Health.

3. "Dental Hygiene," Mary H. Westfall, D.D.S., Dental Health Education, Bureau of Maternal and Child Health, State Board of Health.

4. "Health and Physical Education in the Schools," Thurman B. Rice, M.D., Chief, Bureau of Health Education, State Board of Health.

**TUESDAY, 9:30 A. M.**

1. "Food and Drugs in Relation to Public Health," W. S. Frisbie, Chief, Division of State Cooperation, Federal Food and Drug Administration, Washington, D. C.

2. "Full Time Local Health Departments," C. C. Applewhite, Surgeon, U. S. P. H. S., Chicago, Illinois.

3. "What Next?" Reginald M. Atwater, M.D., Executive Secretary, American Public Health Association, New York City.

**TUESDAY, 2:00 P. M.**

**Syphilis—A Symposium**

1. "The Social Aspects of Syphilis," A. F. Weyerbacher, M.D., Indianapolis, Indiana.

2. "Control Measures in Syphilis," Minor Miller, M.D., Evansville, Indiana.

3. "Observations in General Practice," E. O. Asher, M.D., New Augusta, Indiana.

4. "The Laboratory as an Aid in Early Diagnosis," A. S. Giordano, M.D., South Bend, Indiana.

## CONVENTION BILL SAYS—

*South Bend, Indiana,  
September 21, 1936.*

*Dear Fellow Hoosier:*

*Not to be out-done by all other up-to-the-minute magazines, I am taking it upon myself to supply THE JOURNAL with its first "short, short story" all on one page!*

*Bill Jones, M.D., had just returned from an early morning O.B. In fact, it was still so early that he was meeting all the fellows coming home from the night life of the evening before, and the very earliest of the milk men. But Bill Jones, M.D., was in no mood for sleep. He was worried. Was he losing his cunning at deliveries? No. Was he getting too old for these night O. B. eases? Hardly—he was only thirty-three. Still he was worried, and rightly so. He hadn't collected a cent for his night's labor, for one thing, and he realized that he had worked too well but not too wisely—not too wisely, for he realized that he needed a rest.*

*On getting back to his home at three a. m., Bill Jones, instead of preparing for bed, got out his old pipe, picked up his JOURNAL, and began to read. This was more than just an ordinary JOURNAL. This was the South Bend Convention number, and Bill Jones, M.D., immediately began to get hot and bothered, and right then and there he decided that he was going to South Bend.*

*To South Bend he went, and what a time he did have, meeting the old gang, exchanging views, hearing the other fellow's hard luck stories, and being a man among men. In short, he had for himself one honey of a time! Now, among other things, while in South Bend, he tried his skill at guessing the number of Spanish onions in a sack. (First prize was one fully equipped Boston bag.) Fact is, he spent the better part of one morning scientifically, as it were, doping out ways and means of beating the game. After much serious computation, he turned in his figure and all but told them to wrap the bag up for him to take home. December fifteenth rolled around, and Bill Jones, M.D., was beginning to lose faith in his ability to count onions in a bag; moreover, if the bag was not forthcoming, he would have to get one for himself as a Christmas present, because his was getting a little run down at the corners.*

*On December twenty-third, lo and behold! at 4:12 p. m., just as his last patient for the afternoon was leaving, a telegram came from the Whosit Surgical Supply Corporation in Philadelphia which read:*

**BILL JONES, M.D., INDIANA:** WE ARE GLAD TO INFORM YOU THAT YOU WERE THE ONLY ONE OF THE 1,348 IN ATTENDANCE AT THE SOUTH BEND CONVENTION OF THE INDIANA STATE MEDICAL ASSOCIATION WHO SUBMITTED THE CORRECT NUMBER OF ONIONS IN THE SACK AT OUR EXHIBIT LAST OCTOBER. HOWEVER WE ASKED YOU HOW MANY SPANISH ONIONS

WERE IN THE SACK AND WHEREAS THE NUMBER SUBMITTED BY YOU WAS PERFECT, 389, THEY WERE NOT SPANISH ONIONS AT ALL BUT BERMUDA ONIONS. UNDER THE CIRCUMSTANCES IT WOULD NOT BE FAIR FOR US TO AWARD YOU THE PRIZE BECAUSE IN REALTY YOU WERE 100% WRONG. HOWEVER IF YOU WILL TAKE THIS TELEGRAM AND FIVE CENTS TO ANY SODA FOUNTAIN, YOU WILL BE ABLE TO GET ONE BOTTLE OF SODA-POP WITH OUR COMPLIMENTS. REGRETFULLY YOURS, SAM WHOSIT.

*The moral of this tale is: Know your onions! I say to you, with all sincerity, know your onions and come to South Bend for the Convention!*

*Yours,*

*Convention Bill.*

## LAST CALL FOR HOTEL RESERVATIONS!

**The Following Hotels Offer Accommodations at Rates Quoted:**

**Hotel Oliver:** Single, \$2.50; double, \$4.00; twin beds, \$4.50 (and up). Detached bath, single, \$2.00; double, \$3.50.

**Hotel Hoffman:** Single, \$2.50 to \$3.50; double, \$4.00 to \$5.50; twin beds, \$4.50 to \$7.00.

**Hotel LaSalle:** Single, \$2.00 to \$3.00; double, \$3.50 to \$5.00. Detached bath: Single, \$1.50; double, \$2.50.

**Hotel Jefferson:** Single, \$2.25 to \$2.75; double, \$3.00 to \$3.50; twin beds, \$4.00 to \$5.00. Detached bath: Single, \$1.50 to \$2.00; double, \$2.00 to \$3.00; twin beds, \$3.00 to \$3.50.

**Hotel Morningside:** Single, \$2.00; double, \$3.00. Detached bath: Single, \$1.50; double, \$2.00.

**Hotel Robertson:** Single, \$2.00; double, \$2.50. Detached bath: Single, \$1.50; double, \$2.00.

**LaSalle Annex:** Single, \$1.75; double, \$2.50.

**Mishawaka Hotel (in Mishawaka):** Single, \$2.00 to \$2.50; double, \$3.50. Detached bath: Single, \$1.50; double, \$2.00.

If you have not made your hotel reservation for the South Bend session, DO SO IMMEDIATELY. Use the coupon printed below:

ALFRED ELLISON, M.D.,  
826 SHERLAND BUILDING,  
SOUTH BEND, INDIANA.

MAKE RESERVATIONS FOR HOTEL ACCOMMODATIONS AS FOLLOWS:

HOTEL 1 \_\_\_\_\_

2 \_\_\_\_\_

3 \_\_\_\_\_

(Indicate 1st, 2nd and 3rd choice)

ROOM REQUIREMENTS \_\_\_\_\_  
(single, double, twin beds)

RATE REQUESTED \_\_\_\_\_  
(see below)

I EXPECT TO ARRIVE IN SOUTH BEND \_\_\_\_\_

NAME \_\_\_\_\_

ADDRESS \_\_\_\_\_

## SIGHT-SEEING IN SOUTH BEND

South Bend, the 1936 Convention City, is one that will hold your interest, and one that you will be glad to have visited.

Sight-seeing trips on Tuesday, October 6, at 1:30 p. m., will include visits to the plants of the Studebaker Company, the Bendix Corporation, the South Bend Bait Company, and a trip to St. Mary's and Notre Dame schools. The following short articles will give you an idea of some of the interesting things that you may expect to see.

### SOUTH BEND BAIT COMPANY

Physicians attending the Indiana State Medical Exhibit at South Bend, whose hobby is fishing, will, so to speak, "kill two birds with one stone," as plans have been made to visit the South Bend Bait Company and see fishing tackle in the making.

A unique display of South Bend Tackle will feature rods, reels, lines, and lures, to say nothing of the Paul Bunyan size Bass-Oreno, Pike-Oreno, Trix-Oreno and other lures which will be on exhibit at the convention. Through the courtesy of Mr. Ivar Hennings, president of the South Bend Bait Company, arrangements have also been made whereby conducted tours through various parts of the factory showing different steps in the making of split bamboo rods, artificial wooden lures, bass bugs and flies, will give those whose hobby is fishing first hand information about fishing tackle and how it is made.

The company just recently opened its new office and factory, making it one of the most modern and up-to-date plants of its kind in the country today, which will insure our seeing the newest methods in the manufacturing of fishing tackle. A tour of the factory will prove both interesting and educational to all—even to those who don't try to match their skill with the "finny tribe."

### UNIVERSITY OF NOTRE DAME

One of the highlights of the visit to the University of Notre Dame will be the inspection of the Wightman Memorial Art Gallery in the university library. It is regarded as one of the finest collections of religious art in the United States and is valued at well in excess of a million dollars.

Although there are some modern works of note, the bulk of the pictures have been selected from the masters of religious art of the sixteenth and seventeenth centuries, including works by such masters as Van Dyck, Murillo and others.

In addition to the more than three hundred paintings, the gallery also includes the Frederick Wickett collection of early Italian works of art, and the Vincent Bendix tapestry collection.

The Wightman Gallery was formally arranged in 1917 when a group of one hundred and thirty-

six paintings was presented to the late Rev. John Cavanaugh, C.S.C., former president of Notre Dame. These pictures had been held for many generations by kinsmen of His Holiness Pope Pius VI and of Napoleon I, and some of the Capuchin monks of Benevento. A further contribution was made by Mr. Charles A. Wightman, of Evanston, Illinois, and the two groups were added to the priceless masterpieces which had been brought to Notre Dame by priests and professors from the time of its founding in 1842.

### THE STUDEBAKER PLANT

Since 1852, when Henry, then aged 26, and his brother Clem, aged 21, established the firm of H. & C. Studebaker, blacksmiths and wagon builders, Studebaker has been continuously building quality vehicular transportation.

From covered wagon to farm wagon, from gasoline buggy to modern automobile, the name Studebaker has been known throughout the world as a sign of craftsmanship. From the small plant, the organization has grown until today more than 7,000 employees are engaged, most of whom are at the home office and factory in South Bend.

Survivor of many difficult periods, Studebaker is the only automobile manufacturer to have successfully weathered the trials of receivership, and that in the most extended business depression we have known. During the first seven months of 1936, Studebaker dealers sold 43,512 passenger cars and trucks, exceeding sales for each of the entire three previous years.

You will be impressed as you walk through Studebaker's modern foundry, which covers eleven acres; the motor plant, where a thousand employees are engaged in machining and assembling motors and car parts; the body plant, with every modern facility for producing Studebaker's famous steel-reinforced-by-steel auto bodies. You will visit the spring plant and see the fabrication of Studebaker springs by men, many of whom have been building vehicular springs for a score or more of years. In the stamping plant are scores of punch presses, large and small, stamping sheet steel parts—one of the safest operating stamping plants in industry.

Of course, the final assembly division is of particular interest for there the cars literally grow before your eyes until at the end of the line they are driven off under their own power, ready for final adjustment, inspection, and shipment.

Of particular interest to physicians is the fact that Studebaker ranks close to the top in safety records among the large automobile industries reporting industrial accidents to the National Safety Council, having been in second place for two consecutive years. Studebaker's plant dispensaries

are recognized by the certificate of approval of the American College of Surgeons, after extensive investigation.

#### SAINT MARY'S COLLEGE

Two miles north from the business district of South Bend and one mile west of the University of Notre Dame, on the Dixie Highway, is Saint Mary's College. Six hundred acres extending two miles north and east along the historic Saint Joseph River provide natural and cultivated beauty ideal for a school. Facilities for the pageantry of academic life, cap and gown ceremonies, May Day processions and other out-of-door festivals are particularly attractive.

The college dormitory, the newest building on the campus, is a Tudor-Gothic structure of buff brick with Bedford stone trim. It includes five units, dominated by the great central tower rising five hundred feet above the group. A thirteenth century statue of Our Lady of the Trinity in a niche above the main entrance intensifies the tower's simple strength. This building contains the great hall, a commodious lounge, guest parlors, the library, a chapel with three exquisite altars of Carrara marble, a Louis Quatorze ball room, recreation halls for indoor sports, shops, soda fountain, and private rooms tastefully and comfortably furnished. The pictures of the art collection at Saint Mary's are not assembled in a single gallery but hang in the great hall and drawing rooms, an intrinsic part of the cultural life of the students.

The administration building, to the south of the college dormitory, contains the business offices of the college, the little theater, and laboratories, class and lecture rooms for the science departments. Other buildings of interest include the conservatory of music, a buff brick building adjoining the administration building; the gymnasium, at the extreme south side of the campus; the students' infirmary, just west of the gymnasium; the convent chapel of Our Lady of Loretto, famous for its high altar and four niched altars of white marble, and for its beautiful stained glass windows; and Pine Grove Club House, a delightful place for informal parties, on the east side of the south campus.

Saint Mary's College is dedicated to the whole girl, to what she is and what she can become. Its aim is the perfecting of her personality through education. It offers to the modern young woman a culture permeated with the richness of a tradition that begins with the band of French Sisters who, in 1843, came to perpetuate in a new world their educational ideals. The growth of Saint Mary's College is the visible monument to the enterprising spirit and high courage of its founders and leaders.

#### STATE FAIR EXHIBIT

A record crowd of more than 60,000 viewed the exhibit of the Indiana State Medical Association and the American Medical Association at the Indiana State Fair, September 5th to 11th, inclusive.

A series of nine groups showing the advances in the field of medicine were displayed. These were the same groups which attracted so much interest at the Chicago Century of Progress Exposition.

Information concerning the value of various antiseptics as well as information concerning various health questions was presented in card index form. An electrically lighted and colored drawing of the digestive, nervous, and vascular systems of the body was shown. This material was supplied by the American Medical Association.

Several thousand pamphlets dealing with infectious diseases and their prophylaxis were distributed; also, two thousand pamphlets on simple goiter, which were supplied by the Metropolitan Life Insurance Company, were distributed.

Through the cooperation of the Indiana University School of Medicine, a very interesting series of basal metabolism tests was made on 1,180 visitors. These examinations were made with the electrical impedance machine which has been developed at the school. The test is based on the fact that the resistance of the body to the passage of an electrical current changes when a toxic goiter is present. The advantage of the test is that it may be done at any time, regardless of whether the patient has eaten or exercised.

A great many examinations have been made and have been found to check closely with those of the usual BMR outfits.

Of the examinations made, the following results were tabulated: Normal, 1,070; Hypo, 67; Hyper, 43. When marked hyperthyroids were found, they were advised to see their family doctor.

A member of the committee was present each day to answer questions and to assist in the tests.

Through the courtesy of the Indiana University Hospitals, a nurse in uniform was present to assist in the metabolism examinations which were made by senior medical students.

Other exhibits in the same building were sponsored by the Indiana Pharmaceutical Association, the Indiana Tuberculosis Association, the Indiana Hospital Association, the Indiana State Nurses Association, and the Indiana State Dental Association,

## PRESIDENT'S PAGE

### INTEREST — INVESTIGATION — KNOWLEDGE

The art of being able to make a good use of moderate abilities is something to be sought and cultivated.

Medical research is too often thought of only in terms of great institutions with special technical equipment and unlimited financial resources, directed by great investigators. The interest of the practicing physician in the possibilities of individual clinical investigation is thereby dulled. This is especially to be regretted when it is recognized that all basic medical research is founded upon ideas born in the minds of medical men by observation of phenomena taking place in the human body. This living human laboratory is not confined solely to great institutions, but, with its problem already prepared for study, presents itself in thousands of variations to doctors each day in search of relief. Here are offered tremendous possibilities for observation and research—a really scientific approach to treatment. Many of the greatest discoveries have been made without recourse to any other laboratory.

In many instances the simplicity of the principle underlying many related phenomena is amazing and must awaken wonder that it remained so long unrecognized. Frequently more impressive is the simplicity of the method by which the principle was identified, often without any special equipment. Those who were privileged to hear Sir Thomas Lewis, in discussing angina, explain his study of the painful effect of effort upon muscle to which the flow of blood is restricted, could not help but be impressed by the simplicity of the demonstration. The only equipment used was a constricting rubber band by which the blood supply to muscles of the arm could be regulated as certain specified movements were repeated and the time of appearance of pain was noted. Scientific history is replete with great discoveries based on equally simple methods. Great value attaches to these discoveries in that each determination of a simple underlying cause has in its very simplicity the suggestion of a method of treatment. Possibilities of clinical investigation are not generally limited to great medical centers because of scarcity of available material, in that all communities geographically so located as to have similar conditions of climate and general environment exhibit a similar cross-section of diseases. Many of these patients, if given simple examinations such as are possible everywhere need only informed medical observation in the village to equal the results of the great hospital. Medical knowledge is cumulative and made up of many separate discoveries, often the observations of many different men. From this accumulation of evidence, deductions and further investigation lead to greater discoveries. What is most

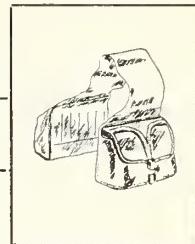
needed is a means of interchange and correlation of these fragmentary portions, gained by separate investigators, so that the whole may be recognized. The scientific exhibits arranged for medical meetings were established in part for this purpose and have been very helpful.

Much may be gained by discussion between those interested in the same or related problems, which would obviously not develop if only written reports were to be depended upon. I cannot conceive of anything more stimulating to good medicine, or more richly productive, than a scientific meeting with as many exhibits as there are new and worthwhile ideas—selected for the quality of the studies offered. Each exhibit should be attended by the original observer with whom his findings could be discussed. Surprising confirmation of observations would come from clinicians who might not otherwise report their experiences. Ideas are the essential elements in scientific progress, and they are not limited to certain investigators or institutions. It is, however, not intended to belittle the work of research institutions, the valuable contributions of their investigators or the need of laboratories. Such work is invaluable. But, detached facts are not of practical value and medical advance is attained by establishing relationship of facts to other facts, identifying underlying principles and applying them to practical problems. The broader the experience, the greater the possibilities for observation and the greater should be the incentive for study and the development of new ideas. The man who does not think beyond the memorized description of disease and rules of treatment misses all the pleasure of exploration and discovery.

Given sufficient investigative interest to each medical man of experience and moderate ability, and scientific progress is assured—add to each the stimulus of one good idea, and the possibilities are limitless. Genius is rare, and progress is dependent upon men of moderate abilities who make good use of them.

Outstanding research has been carried on in Indiana, but there is need for still more clinical investigation. There are in this state many men of ability and sufficient training to make worthwhile clinical studies, who need the stimulation that only the activities of medical organizations can provide. Many could make valuable contributions from their observations and should be encouraged to report them. There will be many exhibits with attendants, helpful demonstrations of methods, and much of interest at the South Bend meeting.

*R. L. Dennerich*



## Indiana Medicine in Retrospect

L. C. ZERFAS, M.D.  
Historian, Indiana State Medical Association

### PROCEEDINGS OF THE FIRST MEDICAL DISTRICT SOCIETY

In the recent series of articles published in *THE JOURNAL*,<sup>1</sup> the first state law (1816) providing for the formation of three district medical societies, the names of the censors and their biographies, and the copy of the Constitution and Bye-Laws of the Second Medical District (1817) have been included. It is regretted that the actual proceedings of all of these various district society meetings are not available. The published notices of semi-annual meetings in the current newspapers, and an occasional comment or notice of business transacted gives valuable information. Fortunately the proceedings covering the first few years of the First Medical District Society have been preserved.<sup>2</sup> It will be recalled that the first medical district was composed of the counties Knox, Sullivan, Davies, Pike, Warrick, Posey, and Gibson.

The proceedings are as follows:

"Vincennes, June 2d, 1817.—In conformity to an act of the Legislature, passed the 24th day of December, 1816, entitled an 'Act to regulate the practice of Physic and Surgery,' the following censors appointed by said act met at the house of Peter Jones, in the town of Vincennes, on the first Monday in June, 1817, viz.: Elias McNamee, Jacob Key Kendall, David M. Hale and Thomas Polke; Jacob Key Kendall chosen Chairman, and Thomas Polke, Secretary. Board adjourned until 6 o'clock p. m., the same day.

"Board met pursuant to adjournment and proceeded to an examination of Wm. C. Whittlesey, Philip Barton, Wm. Clark, Lawrence S. Shuler and John L. McCollough, for the practice of Physic and Surgery. Ordered that the same be licensed. Board adjourned until June 3rd, at 3 o'clock p. m., at the house of C. Graeter, Vincennes.

"At this meeting, June 3d, 1817, on motion, it was

"Resolved, That the Medical Censors and Licensed Physicians of the First Medical District, proceed according to law to organize the Board for said District."

"On balloting for officers for the Board, Elias McNamee was duly elected President; L. S. Shuler, Secretary; David M. Hale, Treasurer, and Key

<sup>1</sup> Indiana Medicine in Retrospect, *THE JOURNAL* of the Indiana State Medical Association, Vol. 29, No. 6, June, 1936, pp. 296-297; Vol. 29, No. 7, July, 1936, pp. 351-352; Vol. 29, No. 8, Aug., 1936, pp. 393-395; Vol. 29, No. 9, Sept., 1936, pp. 501-502.

<sup>2</sup> Transactions of the Indiana State Medical Society, 1874, pp. 54-56.

Kendall, Shuler, Barton, Polke and McCullough, Censors.

"Vincennes, May, 1818, on motion it was

"Resolved, That discretionary power be given to the President to appoint three persons on behalf of this Board, to meet delegates appointed by the other District Societies, at such time and place as shall be agreed upon for the formation of a State Medical Society." . . .

"A letter from Dr. Lyman Spalding, of New York, to David M. Hale, on the subject of forming a National Pharmacopoeia, was read and laid before the Board."

"November, 1818.

"Dr. Hale presented a letter from Dr. Lyman Spaulding, of New York, together with a circular letter from the corresponding committee, of New York, relative to a National Pharmacopoeia, which was, on motion, approved."

"Semi-annual meeting at Vincennes, May, 1819, two candidates were presented for examination and membership and rejected. At this meeting on motion, it was

"Resolved, That two delegates be chosen to meet in Convention with delegates from the other District Societies for the purpose of forming a "State Medical Society," and to hold such correspondence with the members of the District Board as they may think proper in order to form the said Society. On counting the ballots it appeared that L. S. Shuler and Philip Barton were elected delegates." On motion

"Resolved, That Elias McNamee, L. S. Shuler, Hiram Decker, Philip Barton and Wm. Whittlesey, be a committee to choose a delegate to meet in Convention for the purpose of forming a "District Pharmacopoeia," and for a general corresponding committee." On motion

"Resolved, That the Corresponding Committee be instructed to accept (if in their opinion it should be expedient) the proposals of Dr. J. Smith, United States Agent for Vaccination, for establishing a "National Vaccine Institution." On motion of Dr. Shuler, it was

"Resolved, That the Constitution be amended by the addition of the following article. No person shall be admitted to an examination before the Medical Censors without producing satisfactory evidence of having studied Physic and Surgery for the full term of *three years*.

"Resolved, That it shall be the duty of the

Secretary to pursue such measures as may be necessary to carry into effect the law regulating the practice of Physic and present to the Grand Jury, or to the Prosecuting Attorney of each county in the District, all unlicensed practitioners of medicine.”

The following notices were found in newspapers of that time:

“A meeting of the Board of Physicians and Surgeons of the First Medical District will be held at the House of Francis Cunningham in Vincennes on Monday, the 1st day of November next (1819) at 10 o'clock a. m. By order of the President, Hiram Decker, Sec'y.”<sup>3</sup>

“A special meeting of the Medical Society of the First Medical District will be held in Vincennes on the 18th day of December, next (1819) for the purpose of choosing Delegates to meet in convention to form a State Medical Society. L. S. Shuler, Pres't. H. Decker, Sec'y.”<sup>4</sup>

“The association for the First Medical District in the State of Indiana having convened at the Inn of F. Cunningham, in Vincennes, on the first Monday of May, 1820, being the day appointed for electing the officers for the ensuing year—no applications for license and admissions being made—the Society proceeded to the election, when, on counting the ballots, it appeared that the following gentlemen were duly elected, viz.: E. McNamee, President; H. Decker, Secretary; R. Allison, Treasurer, and W. C. Whittlesey, L. S. Shuler and P. Barton, Censors.

“It appearing, on enquiry, that the question given out at the meeting of the Society held on the first Monday in May, 1819, for discussion at our last meeting, viz., ‘What are the Medicinal Virtues of Calomel?’ has not received the necessary attention and discussion, which its importance merits, and it appearing that one of the members has commenced, but not finished, an essay on the subject—Therefore the President continues the aforesaid question, and enjoins it on, and recommends it to the attention of every member of this Society.

“It also appears from the records of the Society that a resolution passed at their meeting, on the first Monday of May, 1819, for carrying into effect the laws of the State regulating the Practice of Physic, has not hitherto been acted on; whereon the Secretary is again enjoined to be vigilant in executing the aforesaid resolution, and which is in the following words, viz.: ‘Resolved, That it shall be the duty of the Secretary to pursue such measures as may be necessary to carry into effect the laws regulating the Practice of Physic, and present to the Grand Jury, or to the Prosecuting Attorneys, of each county in this district, all unlicensed practitioners of Medicine.’

“By order of the Society, H. Decker, Secretary.”<sup>5</sup>

“Extract from the Minutes of the First Medical Board at their Semi-annual meeting on the first Monday in November, instant (1820).

“1st. Resolved, That W. C. Whittlesey, Philip Barton, and L. S. Shuler be delegates to represent this Board at the annual meeting of the State Medical Society, and to be a general correspondence Committee.

“2nd. Whereas, by an act of the General Assembly of this State this Board is invested with corporate powers, Therefore, Resolved, That the Secretary collect by law or otherwise, all debts, fines and penalties due the Society under its rules and regulations.

“By order of the Society. W. C. Whittlesey, President Pro. Tem., J. D. Woolverton, Secretary Pro. Tem.”<sup>6</sup>

“A meeting of the Physicians and Surgeons of the First Medical District, will be holden at the Inn of Christian Graeter in Vincennes on the first Monday in May next (1823). L. S. Shuler, President.”<sup>7</sup>

It is interesting to note that the proceedings (1818) record a consideration of the appointment of delegates to meet those of other district societies for the purpose of organizing the State Medical Society. Several unsuccessful attempts were made to convene with the other district delegates, but it was not until 1820 that they actually met. The subject of the formation of the National Pharmacopeia also received their attention, but it was not until ten years later (1828) that the first National Pharmacopeia was finally issued. The need for a district pharmacopeia was plainly evident from the advertisements of various vegetable compounds that filled the newspapers of the time, claims for the superiority of each being widely divergent, even among the physicians themselves. In many instances the rarer medicines could be obtained only with great difficulty and expense and some not at all, so that a profusion of substitutes chiefly of vegetable origin arose. Most of the medicines during this period were purchased from Philadelphia, Baltimore, Boston, and New York. Cincinnati did not become an important distributing center until years later. The establishment of different systems of medicines was often based on the reputed cures effected by certain medical formulæ, or drugs. Since the beginning of the latter part of the 18th century books containing home recipes and means of treating the sick had been published in England and were soon followed in this country by books of a similar nature. Many medicines of Indian origin had come down from household to household, which must have presented not a few difficulties to family physicians unfamiliar

<sup>3</sup> *Indiana Sentinel and Public Advertiser*, Vincennes, May 13, 1820, Vol. 4, No. 5, p. 1, c. 5.

<sup>4</sup> *Ibid*, Nov. 25, 1820, Vol. 4, No. 33, p. 3, c. 5.

<sup>5</sup> *Farmers and Mechanics Journal*, Vincennes, Vol. I, No. 17, April 24, 1823, p. 3, c. 4.  
(Continued on Page xxiv)

<sup>3</sup> *Indiana Sentinel*, Vincennes, Oct. 23, 1819, p. 3, c. 2.

<sup>4</sup> *Western Sun and General Advertiser*, Vincennes, Dec. 4, 1819, Vol. 10, No. 49, p. 2, c. 1.



## ANNUAL EXAMINATION FOR BARBERS

An amendment to the state barbers' license law to provide for an annual physical examination of barbers, including a Wasserman test, will be asked of the 1937 General Assembly, Frank E. McKamey, secretary of the board, has announced.

Under the present law a physical examination is required when an applicant first applies for a certificate authorizing him to be a barber in this state. Although the license must be renewed annually, the applicant is not required to take an additional physical examination.

"The mere fact that a barber is physically sound and fit to practice his profession at the time he first receives a license certainly does not guarantee that he will remain so over a period of years," Mr. McKamey said. "For that reason, reliable men in the business believe that an annual examination is the best safeguard that can be given the public, and that is what we are going to ask of the next session of the state legislature."

Mr. McKamey pointed out that the Indiana law regulating persons engaged in work in beauty parlors is stricter than the barber law, a physical examination being required annually for beauty operators. He said that in his opinion the regulations for beauty operators and barbers should be identical so far as health requirements are concerned.

Sanitary conditions of barber shops in Indiana have improved greatly since the law was adopted, Mr. McKamey said, and an improvement has been made generally even within the past year. Relatively few shops fail to meet requirements for sanitation, he said.

However, additional inspectors are needed, according to Mr. McKamey. The board now employs four inspectors who make the rounds of all barber shops of the state. Conditions, however, could be improved if the number of inspectors were doubled, he said. To make this additional inspection possible, the board also will ask an increase in the annual license fee, which now is \$2. The increase probably would be to \$3.

During the past year approximately fifteen first applicants were turned down because of venereal disease, Mr. McKamey said. Very few tubercular persons even apply for licenses, he said.

## STATE HOSPITALS

A total of 1,317 persons were admitted to the state's hospitals for the insane during the last fiscal year, according to tabulations in the state

division of public welfare. This was a slight increase over new admissions in 1934-1935 (the fiscal year ends June 30), which had a total of 1,284. Of the total new admissions, 369, comprising the largest group, were with dementia praecox (schizophrenia). The next largest group, numbering 227, were with general paralysis. There were 194 with cerebral arteriosclerosis; 132 manic depressives.

The psychoses listed for the remaining new admissions were: traumatic, 3; senile, 69; cerebral syphilis, 10; Huntington's chorea, 8; brain tumor, 2; other brain or nervous diseases, 14; alcoholic, 30; due to drugs and other exogenous toxins, 3; pellagra, 1; other somatic diseases, 26; involution melancholia, 59; paranoia and paranoid conditions, 20; epileptic, 18; psychoneuroses and neuroses, 44; psychopathic personality, 13; mental deficiency, 55; undiagnosed, 9; without psychosis, 11.

## WATER SUPPLIES

The Indiana state division of public health has started on a program to eliminate possible contamination of public water supplies through cross connections with private supplies.

Officials of the division have chosen Indianapolis as the city where the program is to be started, and already letters have been sent to 250 factories, stores, hospitals, and other institutions which maintain cross connections between the city water supply and their own wells.

According to B. A. Poole, chief of the bureau of sanitary engineering, there are 320 cross connections known in Indianapolis. Practically every larger city of the state has similar situations and the health division official estimated that there are between 800 and 900 cross connections.

The letters, first step in the program, simply called attention to the cross connections and their dangers and asked the various institutions to install proper types of valves which will prevent any possible mixing of water from the two supplies. The institutions are given until October 15 to comply. In event they fail, the Indianapolis Water Company will be ordered to cut off the supply.

The program is under the supervision of Dr. Verne K. Harvey, director of the division of public health, and W. H. Frazier, his assistant.

A study of outbreaks of water-borne disease caused by polluted water entering potable water supply systems through cross connections was made by Dr. Harvey some time ago. The study showed 2,649 cases of typhoid fever, 124 deaths, and 2,600 cases of gastro-enteritis. Fort Wayne had two serious outbreaks, one in 1923 and the second in 1929, but that city has since remedied its own situation and is free of danger, Dr. Harvey said. The study was made before the recent outbreak in Chicago which resulted from cross connections with private supplies of water, Dr. Harvey said.

The program will be extended to other Indiana cities as soon as the rush with Indianapolis is completed, officials said.

## DIPHTHERIA IN AUGUST, 1936

We are very pleased indeed to observe that no deaths from diphtheria were reported for August, 1936. This is probably the first month in the history of Indiana when this could be said. True enough, in the month of May, 1931, there were no deaths reported, but later it was found that the good report was due to the fact that the returns were not sent in time to be tabulated. Possibly that will happen in this case, but we are hoping not.

Diphtheria has been declining for the past three or four months, somewhat corresponding to the same months last year. For the whole year, to be sure, we are still high, which is due largely to the fact that the month of January, 1936, was particularly bad. So far there have been 67 deaths this year. Normally we expect more deaths in the last four months of the year than in the first eight months. There is a possibility, and perhaps a probability that we are on the descending limb of the diphtherial cycle, in which case we can look forward to the possible establishment of new low rates in the years immediately ahead. It is not likely that we shall be able to make a new low rate for 1936.

Doctors are warned to be on the lookout for all suspicious cases of sore throat, croup, and suddenly developing debilitating disease. It is more than likely that the first few cases of diphtheria in your community will come under one or the other of these guises.

Distribution of the deaths by counties for the period of the year is given below:

<i>County</i>	<i>No. for Year</i>	<i>County</i>	<i>No. for Year</i>
Allen	3	Marion	10
Benton	1	Martin	1
Brown	3	Monroe	1
Cass	1	Montgomery	3
Clark	1	Owen	1
Delaware	1	Parke	2
Dubois	1	Pike	1
Elkhart	2	Ripley	1
Grant	1	St. Joseph	3
Greene	2	Tippecanoe	4
Howard	4	Vanderburgh	3
Jennings	1	Vigo	1
Knox	1	Warren	1
Lake	4	Washington	1
Lawrence	3	Wayne	1
Madison	4		
		Total	67

## SECRETARIES' COLUMN

Don't you think the September issue of THE JOURNAL was one of the best ever?

October 6, 7, and 8 at South Bend. Make your plans now. This will be one of the best state meetings we ever have had.

Medical psychology and medical economics should be included in every doctor's education.

Have you studied the State Social Security Act? Have you had any county society programs that carried out the ideas set forth by the State Board of Health on Maternal and Child Welfare? Has your society had any meetings, public or otherwise, on traffic accidents?

At South Bend this year the scientific exhibit is going to be better than ever. It covers a number of subjects and will be interesting and educational. Be sure to ask the exhibitors for literature on the work they have done.

When you visit the South Bend Bait Company plant remember that they are making money by supplying material for vacations—HEALTH. If you get on the right end of the bait, you will make money by keeping your health!

Did you read the editorial in the September issue of THE JOURNAL on "Syphilis Control"?

The next secretaries' conference will be held the latter part of January, 1937, on Sunday. Each meeting has been better than the preceding one, and this one should be the finest on record.

Remember that there is an election in November, 1936!

*Univited*  
Chairman.

LOOK FOR YOUR FRIENDS  
IN SOUTH BEND  
OCTOBER 6, 7, 8

## DEATHS

MILTON A. GIVEN, M.D., of East Chicago, died September thirteenth in a Chicago hospital after an injury received in an automobile accident in Chicago. Dr. Given was forty-eight years old. He was born in Plotzk, Poland, and came to East Chicago when he was six years old. He served as first-lieutenant in the U. S. Army during the World War, and was health commissioner of East Chicago from 1922 to 1930. Dr. Given graduated from Northwestern University Medical School, Chicago, and has been a member of the Lake County Medical Society, the Indiana State Medical Association, and a Fellow of the American Medical Association.

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ROBERT SPEAR, M.D., of East Chicago, died August twenty-third, aged sixty-six years. Dr. Spear was a native of Cobourg, Ontario. He had practiced in East Chicago since 1897. He served with the U. S. Army in the World War, was a former member of the East Chicago school board, and had been a member of St. Catherine's Hospital staff since the opening of the institution in 1929. Dr. Spear graduated from the Medical Faculty of Trinity University, Toronto, Ontario, in 1897. He was a member of the Lake County Medical Society, the Indiana State Medical Association, the American Medical Association, and the American College of Physicians.

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CHARLES A. CARTER, M.D., of Indianapolis, died September fifth, aged seventy-two years. Dr. Carter had been a resident of Indianapolis for forty-eight years. He was associated with the city and state boards of health for many years, serving as vital statistician for the State Board of Health for fourteen years. He had charge of the food supplies and store rooms at the Indianapolis City Hospital for ten years. Dr. Carter graduated from the Medical College of Indiana, Indianapolis, in 1887.

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FRANKLIN T. WILCOX, M.D., of LaPorte, died September fourteenth, aged seventy years. Dr. Wilcox, whose father and grandfather were physicians, was born in Illinois, and established himself in LaPorte in 1890 where he has since practiced. He graduated from Rush Medical College,

University of Chicago, in 1890, and was a member of the LaPorte County Medical Society, the Indiana State Medical Association, and the American Medical Association.

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ELMER E. ASH, M.D., of Goshen, died August sixteenth, aged seventy-three years. He had practiced medicine in Goshen since 1889. Dr. Ash was a member of the Elkhart County Medical Society, the Indiana State Medical Association, and a Fellow of the American Medical Association. He graduated from the Kentucky School of Medicine, Louisville, in 1885.

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LOUIS AUGUSTUS SANDERS, M.D., of Hazelrigg (Lebanon postoffice), died August tenth, aged sixty-two years. Dr. Sanders had served as Boone County Health Officer. He retired from active practice ten years ago. He was a graduate of the Medical College of Indiana, Indianapolis, in 1888.

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KATHERINE COREY FORD, M.D., of Van Buren, died August eleventh, aged eighty years. Dr. Ford graduated from the University of Michigan Medical School, Ann Arbor, in 1883, and served as a medical missionary in China for many years. She retired from practice at the time of her marriage to Reverend Ford, and after his death she resumed practice in Indianapolis where she was located for many years.

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JOHN S. RAGAN, M.D., retired physician, of Plainfield, died August twentieth, aged eighty-seven years. Dr. Ragan graduated from the Medical College of Indiana, Indianapolis, in 1879. He moved from Avon, Indiana, to Plainfield in 1895, and later became physician for the Indiana Boys' School, at first in connection with his general practice and finally devoting his whole time to the work. Dr. Ragan retired in 1927. He had been ill for the past three years.

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WILLIAM QUICK, M.D., of Delphi, died August twentieth in a Lafayette hospital, after an illness of several weeks. Dr. Quick was seventy-four years old and had practiced in Delphi for thirty-three years. He was a past president of the Carroll County Medical Society and had served many years as secretary of that society. He had served as secretary of the Carroll County board of health and as a member of the Delphi school board. Dr. Quick graduated from the Kentucky School of Medicine, Louisville, in 1891, and was a member of the Carroll County Medical Society, the Indiana State Medical Association, and the American Medical Association.



## HOOSIER NOTES

Dr. Robert A. Staff has been made superintendent of the Smith-Esteb Memorial Tuberculosis Hospital in Richmond to succeed Dr. J. W. Strayer.

Dr. Lloyd Hisrich, of Batesville, and Miss Ella Whipple, of Mt. Vernon, were married August sixteenth.

Dr. Leon Goldman and Miss Belle Hurwitz, of Fort Wayne, were married August twenty-third in Fort Wayne.

The Emergency Hospital of Tipton has been made a member of the American Hospital Association.

Dr. H. C. Rogers, of Rockville, celebrated his ninety-second birthday, August sixteenth.

Dr. Harold Miller, of Seymour, and Miss Fern Wagner, of Flora, were married August thirtieth.

Dr. Russell Rollins has engaged in the practice of medicine in Tipton.

Dr. Max D. Garber has opened an office in Warsaw in the Conrad apartments.

Mr. Thomas A. Hendricks spoke before members of the Richmond Kiwanis Club, August twentieth, on "The Layman Looks at Medicine."

Dr. and Mrs. Stanley Grahame have returned from Kentucky to Summitville where he has opened an office for the general practice of medicine.

Dr. C. L. Ingalls, of Ann Arbor, Michigan, has located in Washington where he will conduct a general practice.

Dr. Ralph Otten has moved from Philadelphia to Darlington, Indiana, where he will conduct a general practice.

Dr. A. M. Baker has moved from Salem to New Albany where he has entered into partnership practice with Dr. Parvin Davis.

Dr. Warren Baker, of Chicago, has moved to Westville where he has taken over the office and practice of the late Dr. F. H. House.

Dr. E. O. Alvis has moved from the Industrial Clinic in the Chamber of Commerce Building to the Hume Mansur Building in Indianapolis.

Dr. Austin Funk, of Jeffersonville, spoke on "Causes of Blindness" before the Jeffersonville Lions Club, August thirteenth.

After an illness and convalescence of several months, Dr. Robert S. Ball, of Lebanon, has resumed his practice.

Dr. Hubert Gros, of Delphi, has been named secretary of the Delphi board of health to succeed the late Dr. W. R. Quick.

Dr. Charles C. McArdle has moved from Anderson to Terre Haute where he has accepted a position on the medical staff of the U. S. Veterans Hospital.

C. O. McCormick, M.D., and G. W. Gustafson, M.D., both of Indianapolis, recently were made members of the American Association of Obstetricians, Gynecologists and Abdominal Surgeons.

Dr. Paul B. Casebeer, of Clinton, addressed members of the Clinton Business and Professional Women's Club, August nineteenth. He stressed the importance of annual physical examinations.

Dr. Mary Bruner, of Greenfield, was honored with a surprise party, August eighth, in celebration of her eighty-fifth birthday. Dr. Bruner is the mother of Dr. C. H. Bruner, of Greenfield.

Dr. Frank F. Hutchins, of Indianapolis, addressed members of the Warsaw Rotary Club, August fourteenth, on "Emotions and How They Affect Everyday Life."

Dr. Simeon Lambright has returned to his home in Covington and resumed his practice. He was injured in an automobile accident several weeks earlier, and had remained in Indianapolis while he recovered from his injuries.

Dr. Wilson T. Lawson, of Danville, now in his fifty-eighth year of practice, celebrated his eighty-seventh birthday at his home September third. Dr. Lawson has been secretary and treasurer of the Hendricks County Medical Society since 1880.

nesota, October 4 to 17, 1936. The program will follow the plan of the past years. The training is on an inactive duty status and is without expense to the Government. Enrollment is open to all Army and Navy reservists of the Medical Departments in good standing. Applications should be submitted to the Surgeon of the Seventh Corps Area, Omaha, Nebraska, or the Surgeon, Ninth Naval District, Great Lakes, Illinois. Enrollment is limited to two hundred.



*Architect's drawing of the new I. U. clinical building. See Indiana University News Notes on page 556.*

Dr. Albert M. Mitchell, of Terre Haute, was formally inducted into the office of president of the National Association of Aerial Physicians at the organization's convention in Los Angeles, August twenty-second.

The board of managers of the William Ross Sanatorium of Lafayette has announced the appointment of J. W. Strayer, M.D., as supervisor and medical director of the institution to succeed the late Dr. William H. Mytinger.

The eighth annual convention of the Central Association of Obstetricians and Gynecologists will be held October 15 to 17 at the Statler Hotel, Detroit, Michigan. Dr. Emil Novak will be guest speaker at the convention. There will be no registration fee. Members of the Indiana State Medical Association are invited to attend.

The ninth annual graduate fortnight of The New York Academy of Medicine will be held October 19 to 31. Evening sessions will be held at the Academy; clinical programs will be in hospitals. The general topic will be "Trauma, Occupational Diseases and Hazards." Non-fellows of the Academy will be charged a registration fee of three dollars. Complete program may be obtained by addressing the Academy, 2 East 103 Street, New York City.

The eighth annual training course for medical department reservists of the Army and Navy will be held at the Mayo Foundation, Rochester, Min-

nesota, October 4 to 17, 1936. The program will follow the plan of the past years. The training is on an inactive duty status and is without expense to the Government. Enrollment is open to all Army and Navy reservists of the Medical Departments in good standing. Applications should be submitted to the Surgeon of the Seventh Corps Area, Omaha, Nebraska, or the Surgeon, Ninth Naval District, Great Lakes, Illinois. Enrollment is limited to two hundred.

#### ELEVENTH INDIANA COUNCILOR DISTRICT MEETING

The Eleventh District Medical Association will hold its fall meeting at Huntington, Wednesday, October twenty-eighth, with the program beginning at two o'clock in the afternoon.

Speakers will include J. O. Arnold, M.D., of Temple University, Philadelphia; George J. Garceau, M.D., of Indianapolis; Paul W. Ferry, M.D., of Kokomo; and Charles P. Emerson, M.D., of Indianapolis. A banquet will be served at 6:30.

Members of the Indiana State Medical Association are invited to attend.

#### UNION DISTRICT MEDICAL ASSOCIATION

The Union District Medical Association will meet in Rushville, October twenty-second. The tentative program includes:

- President's address—"The Consultation Room."
- "State Medicine"—W. U. Kennedy, M.D., Newcastle.
- "Results of Collapse Therapy in Tuberculosis," by E. V. Hahn, M.D., Indianapolis.
- "Bronchoscopy as a Diagnostic Aid," by Dr. M. B. Light, Indianapolis.

## INDIANA UNIVERSITY NEWS NOTES

### NEW BUILDING AT I. U. MEDICAL CENTER

Work was started the latter part of August on the new clinical building at the Indiana University Medical Center in Indianapolis, the architect's drawings for which are shown on page 555. The total cost of the building will be approximately \$550,000 of which the federal government will pay 45 per cent as a PWA project. The remainder will be paid by the university through a bond issue.

Robert Frost Daggett, of Indianapolis, is the architect for the new structure, which will be five stories and will be immediately north of the Robert W. Long Hospital.

The general contract for the clinical building was given to C. R. Wermuth and Company, Fort Wayne. Freyn Brothers, Inc., Indianapolis, received the heating and ventilating contract; Strong Brothers, Indianapolis, plumbing; C. L. Smith Electrical Company, Indianapolis, electric wiring, and Otis Elevator Company, elevators.

### STATE FAIR EXHIBITS

The School of Medicine of Indiana University played a prominent part in the state university's exhibits at the State Fair in September. Health exhibits from the medical school included blood tests and their uses in the saving of life through transfusions, and in the identification of individuals.

Diagnosis and treatment of cancer were impressed through the use of specimens from the central laboratory of the medical center. Food poisoning was the subject of a dietary exhibit showing some of the more common ways in which foods may be contaminated. Specimens were used in the display which emphasized the menace of syphilis.

The Riley Hospital presented a large exhibit of the handiwork of its crippled children in basket making, weaving, woodwork and other activities. These articles were sold under the auspices of the Junior League of Indianapolis and the proceeds used to buy additional raw materials for patients in the Riley Hospital.

A new model of the university's \$5,000,000 health center on West Michigan Street in Indianapolis was shown for the first time at the Indiana State Fair.

The department of biochemistry of the university's medical school displayed an exhibit showing the organic conditions which make for unsafe automobile driving. The effects of intoxication, fatigue and inattention were brought out.

## SOCIETIES — INSTITUTIONS

CARROLL COUNTY MEDICAL SOCIETY met at Burlington, September tenth. Dr. Frank Forry, of Indianapolis, talked on "Cancer."

ELKHART COUNTY MEDICAL SOCIETY held a dinner meeting in the Hotel Elkhart, September third, the opening meeting of the season. The principal speaker was Dr. Carl B. Camp, of Ann Arbor, Michigan.

FAYETTE—FRANKLIN COUNTY MEDICAL SOCIETY held a meeting at Magnesia Springs, near Brookville, September eighth. Dr. Bert Ellis, of Indianapolis, read a paper on "Obstructions of the Larynx." Attendance numbered 17. The next meeting will be held October thirteenth, at the McFarlan Hotel in Connersville.

FLOYD COUNTY MEDICAL SOCIETY members met at New Albany, September eleventh, for a dinner meeting. Dr. Sam A. Overstreet, of Louisville, Kentucky, discussed "Medical Treatment of Disease of the Gall-bladder." Nineteen members and two visitors were present.

FORT WAYNE ACADEMY OF MEDICINE AND SURGERY opened its fall season with a meeting September first, at the Chamber of Commerce Building. Dr. R. L. Hane presented a paper on "The Heart in Thyroid Disease."

FORT WAYNE (ALLEN COUNTY) MEDICAL SOCIETY opened the fall season with a clinical session, September first, at the Chamber of Commerce Building. Clinical cases were presented by Dr. B. S. Cornell, R. W. Wilkins, L. W. Elston, and A. P. Hattendorf. The society has adopted a policy of localizing programs this year; comparatively few out-of-town speakers will be heard.

GIBSON COUNTY MEDICAL SOCIETY members met at the Emerson Hotel in Princeton, September fourteenth. Dr. Charles P. Emerson, of Indianapolis, talked on "Later Developments in the Early Recognition, Treatment and Control of Cancer." Attendance numbered twenty-four.

CRANT COUNTY MEDICAL SOCIETY members together with dentists and attorneys held a golf tournament and dinner meeting at the Meshingomesa Country Club, September ninth. Albert Stump, Indianapolis, was the principal speaker. His subject was "Medico-Legal Problems of Today."

HENDRICKS COUNTY MEDICAL SOCIETY members met at McCloud park, Danville, August twenty-first. A picnic supper preceded the business session.

HENRY COUNTY MEDICAL SOCIETY members met at New Castle, September seventeenth, at the county hospital. Dr. Charles P. Emerson, of Indianapolis, presented a paper on "The Liver; Its Functions and Derangements."

INDIANAPOLIS MEDICAL SOCIETY held its annual medical golf tournament, the final golf and dinner party of the season, at the Highland Golf and Country Club, September twenty-third.

JAY COUNTY MEDICAL SOCIETY met August twenty-eighth at the Portland Country Club, with Dr. Howard B. Mettel, of Indianapolis, as principal speaker.

KNOX COUNTY MEDICAL SOCIETY members met at the Jewel Cafe in Vincennes, September eighth, with Dr. John Kelly, of Indianapolis, as principal speaker. Seventeen members and one guest were present. Two of Dr. Joseph B. DeLee's films, "Complications of the Second Stage," and "Post Partum Hemorrhage," were discussed.

MADISON COUNTY MEDICAL SOCIETY met September twenty-first, at St. Johns Hospital in Anderson. Guest speaker was Dr. Henry O. Mertz, of Indianapolis, whose subject was "The Relation of Urological Diseases to the Differential Diagnosis of General Abdominal Diseases."

ORANGE COUNTY MEDICAL SOCIETY held its September meeting at the Wheeler-Scout park, east of Orleans, September ninth.

VANDERBURGH COUNTY MEDICAL SOCIETY met at the Hotel McCurdy, Evansville, September fifteenth. Dr. John Visher read a paper on "Nerve Injuries," and Dr Howard Mettel, of Indianapolis, talked on "Maternal and Child Welfare."

WABASH COUNTY MEDICAL SOCIETY met September ninth, at the Wabash County Hospital. Dr. J. C. Vaughan was the principal speaker and his subject was "Diets." Attendance numbered thirteen.

#### THE INDIANA STATE MEDICAL ASSOCIATION EXECUTIVE COMMITTEE

August 16, 1936.

Roll call showed the following present: C. A. Nafe, M.D., chairman; H. H. Wheeler, M.D.; R. L. Sensemich, M.D.; E. D. Clark, M.D.; O. O. Alexander, M.D.; A. F. Weyerbacher, M.D., and T. A. Hendricks, executive secretary.

##### Membership Report

Number of members August 15, 1936	2,769
Number of members August 15, 1935	2,699
<hr/>	
Gain over last year	70

Number of members December 31, 1935

2,807

##### Treasurer's Office

The Auditing Committee has been appointed and has submitted a report which is to be published in THE JOURNAL.

##### 1936 Session at South Bend

(1) *Annual report of Committee.* This report is all ready for publication in THE JOURNAL.

(2) Places have been arranged for twenty-three scientific exhibits, the largest scientific exhibit in the history of the State Association.

(3) *Commercial exhibits.* Thirty-three spaces sold; five spaces yet to be sold. At least six good prospects to take these spaces.

(4) *Convention badges.* The Committee decided to use the same style badge this year as was used last year.

(5) *Dr. Leach's certificate of appreciation.* This certificate was signed by the officers of the Association. Mrs. Leach writes that she cannot be present to receive this certificate. The secretary was instructed to write the president of the Floyd County Medical Society, asking that someone be appointed to be present at the banquet to receive this certificate. Dr. Ragsdale has accepted the invitation to present this certificate.

(6) *Appointment of Committee on Constitution.* The president of the Association is to appoint a Committee upon Recodification of the Constitution in accord with the action of the House of Delegates at the 1935 session.

##### Legislative, Legal and Social Security Matters

(1) Report upon the crippled children features of the Social Security Act and the meeting of the committee appointed from members of the State Association with O. W. Greer, M.D., director, made to the Committee. Details concerning the plan for work in Indiana are to be printed in the September issue of THE JOURNAL, along with an editorial written by Dr. F. S. Crockett, a member of the Committee.

(2) Report made to the Committee that Louis E. Evans, graduate of the University of Chicago, who has been connected with the social service division that handled juvenile delinquents in the Chicago courts, has been appointed to take the place vacated by R. Clyde White as head of the Bureau of Social Research of Indiana University.

(3) Report that was to be made by Albert Stump in regard to the Doctors' Title Act passed in Oregon and referred to the Committee by John R. Frank, M.D., Valparaiso, was postponed until a meeting of the Committee when Mr. Stump is present.

(4) Letters received from the director of the Bureau of Maternal and Child Health to the county medical societies in regard to hiring trained public health nurses brought to the attention of the Committee.

(5) *Physicians acting as optometrists.* Since the passage of the new optometry law which prohibits optometrists advertising "Eye Examination Free," and the price of glasses, the chain optical stores in the state have in several instances obtained doctors to act as managers, and as there is no such limitation in the medical practice act as to what these men may do in this regard, these chain optical stores therefore may advertise as they please.

(6) Letter received from the secretary of the Gibson County Medical Society stating that his society did not desire to have anything to do with the crippled children work which is financed by federal money. The letter stated, "Our previous experiences with FERA, PWA, and WPA convinces us of a soundness of the above statement. We not only do not want to enter into this program but we want to voice our opinion as being absolutely against what is being attempted." The secretary reported that a similar letter from this county society had been brought to the attention of Dr. Greer and the members of the crippled children technical committee. It was suggested that the chairman of the Executive Committee, to whom the letter was addressed, write to Dr. Graves, acknowledging the letter.

(7) Letter received from the executive secretary of the West Virginia State Medical Society in regard to "adult physical rehabilitation" brought to the attention of the Committee.

##### Socialization of Medicine

(1) Booklet on socialized medicine from the Michigan State Medical Society brought to the attention of the Committee. The Committee complimented the Michigan State Society upon the book.

(2) Correspondence in regard to public tuberculosis clinics brought to the attention of the Committee. Dr. Paul Crimm, medical director of the Boehne Tuberculosis Hospital at Evansville, stated in his letter, "It is the policy of all clinics to accept no patients who can pay, unless referred to the clinic by the family physician, or if they cannot pay to be referred to the clinic by some organized social agency. The above policy is practiced by Boehne Hospital at Evansville, where no patients are accepted unless referred to the hospital by the family doctor or some social agency where their ability to pay is always determined.

"May I call to the attention of the Executive Committee that they should not be too severe in their criticism of a local error of this kind, because in our own ranks there is still much ignorance concerning the diagnosis, cure and prevention of tuberculosis. A great many patients die annually because of their physicians' neglect or ignorance, or both. Yet, these same physicians do not attend medical meetings or tuberculosis schools, or if they do attend do not absorb any information along this line. However, I feel that the Indiana Tuberculosis Association and the Indiana Medical Association are making some progress in educating the physician as well as the patient."

A letter from M. A. Auerbach, executive secretary of the Indiana Tuberculosis Association, concerning the complaint, reads in part as follows: "Our relationship with the medical profession has been very good and of course we want this to continue. We urge to the fullest the strictest observance of ethical considerations in the conduct of clinics and I believe you will find this amply covered in the statement of policy. We would appreciate any report of violation so that immediate correction may be brought about and the cooperation of the medical group be furthered."

Enclosed in Mr. Auerbach's letter was the following statement of policy of the state tuberculosis association in regard to clinics:

"The Clinic should be diagnostic in purpose. The general policy should be followed that patients who are under the

care of a physician and who come to the clinic should have the consent of such physician. Persons who are under the care of no physician, however, shall be eligible for examination and if found needing medical care should be advised by the clinician to consult his or her own physician. In the event that the patient has no such doctor, he should be advised of the necessity of procuring one but no recommendation regarding any one doctor should be made. In no case shall the clinician treat the patient or solicit any business. He may, however, exact a charge when requested by a local physician to visit a patient in the home when such patient's physician is agreeable to such charge being made. When the physician does this, however, he is acting as a private consultant. It shall be the policy of the local association conducting the clinic to ascertain so far as possible whether the patient who comes to the clinic is able to pay for an examination, and care should be exercised against admitting such person. The clinic is primarily for those who are unable to pay for the service offered. Patients who are referred to the clinic by a physician shall be accepted without question. The local association also should attempt to secure the approval of the local medical society before establishing the clinic for the first time in the county."

(3) Article in the Indianapolis *Star* stating that the Ontario Medical Association is working on a plan for the introduction of a system of socialization of medical services and voluntary health insurance brought to the attention of the Committee.

(4) Letter from the Des Moines Academy of Medicine which tells of a resolution passed by the Des Moines Academy of Medicine and the Polk County Medical Society of Des Moines, Iowa, brought to the attention of the committee. This resolution follows:

"Each member of the Des Moines Academy of Medicine and Polk County Medical Society shall submit for review by the Board of Censors of the Society a list of all those hospitals, out-patient departments, clinics and organizations to which he gives gratuitous medical service."

#### Group Hospitalization

Letter received from the manager of the Medical and Dental Business Bureau, Inc., of Indianapolis, brought to the attention of the Committee. The Committee appreciated receiving the information but it felt that it could take no action either approving or disapproving this matter in any respect.

#### Meeting of Committee Chairmen

The Committee felt that it was too near the annual meeting of the State Association for such a meeting in the near future.

#### Local County Medical Organization Matters

Letter from B. F. Chambers, M.D., Lyons, Indiana, objecting to certain practices by members of the Greene County Medical Society, brought to the attention of the Committee. This matter had been referred to Dr. C. H. Wadsworth, Washington, Indiana, councilor of the Third District, and the Committee recommended that it be brought up for consideration by the Council at its meeting at South Bend.

#### Commercial Medical Directories

The following letter was received from Dr. Olin West in answer to a letter from the State Association asking whether or not the action of the House of Delegates concerning professional directories included such publications as the *Expert* which charges physicians a fee:

"It is my understanding that the resolutions submitted to the House of Delegates at the Kansas City Session by Doctor Brooksheer, of Arkansas, and reported on by a reference committee and later by the Judicial Council were intended to apply to all purely commercial directories. It is my recollection that at the hearings before the reference committee and before the Judicial Council the directory specifically referred to in your letter was brought into the discussion several times by the author of the resolutions and by others present."

#### State Board of Medical Registration and Examination

Correspondence with H. S. Brubaker, M.D., Huntington, in regard to advertisements by drugless healers brought to the attention of the Committee. This matter had been referred to the State Board of Medical Registration and Examination, and the State Board has corresponded directly with Dr. Brubaker in regard to this matter.

#### Formation of Medical Foundation by Colorado State Medical Society

The Colorado State Medical Society, according to an article in the August issue of the Colorado State Medical *Journal*, has formed a medical foundation. This article was turned over to a member of the Committee for study and report at the next meeting of the Executive Committee.

#### THE JOURNAL

(1) *Increase in advertising rates.* A letter was received from the Cooperative Medical Advertising Bureau of the American Medical Association asking whether or not the management of THE JOURNAL felt that now was the time to increase advertising rates. In view of the increased cost of publishing THE JOURNAL over last year, the Committee instructed the executive secretary to prepare a statement concerning the percentage of increase per page over last year and the increase that would be needed in advertising rates to compensate for this increased cost for publication of THE JOURNAL.

(2) *Support of JOURNAL advertisers.* It was suggested that Dr. Cleon Nafe, chairman of the Executive Committee, make a verbal report to the House of Delegates during the annual session at South Bend, asking the members to support THE JOURNAL advertisers. This will be made as an amendment to the regular report of the Executive Committee which will be brought to the attention of the House of Delegates at the opening meeting of that body.

(3) *Souvenirs for convention.* The Committee decided to give no JOURNAL souvenirs this year.

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In addition to the articles already enumerated, the following have been accepted by the Council on Pharmacy and Chemistry of the American Medical Association:

Cheplin Biological Laboratories, Inc.

Mercury Salicylate, 1 Grain (0.065 Gm.) Suspended in Oil, 1 cc.

National Drug Co.

Refined Tetanus Toxoid (Alum Precipitated).

Scientific Sugars Co.

Kinney's Cod Liver Oil Concentrate Capsules.

Kinney's Cod Liver Oil Concentrate Liquid.

G. D. Searle & Co.

Ampoules Bismuth Sodium Tartrate—Searle, 3 per cent, 2 cc.  
Solution Bismuth Sodium Tartrate—Searle, 3 per cent, 60 cc.  
vial.

Sharp & Dohme, Inc.

Antipneumococcal Serum Types I and II.

United States Standard Products Co.

Bismuth Salicylate in Oil.

Scarlet Fever Streptococcus Toxin for the Dick Test.

Winthrop Chemical Co., Inc.

Granules Protargol Compound.

Jensen-Salsbury Laboratories, Inc.

Botulinus Antitoxin (Human) (containing 2500 units each  
of Type A and Type B Antitoxin).

Sharp & Dohme, Inc.

Grass Mixture Pollen Extract (Timothy, June, Orchard,  
Sweet Vernal, and Red Top Grass Pollens) and Grass  
Mixture Pollen Extracts (Pollens of Southwestern  
Grasses).

Antipneumococcal Serum Types I and II Combined.

Nonproprietary Articles

Tetrachlorethylene.

# THE JOURNAL

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### MEDICAL PROGRESS—HISTORY FORECASTS\*

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South Bend

Emerson defined progress as the activity of today and the assurance of tomorrow. I am mindful of the impossibility of discussing so large a subject in any detail, but if one would view the far-reaches, he must look beyond the immediate obstacles and see in proper perspective the valleys and distant mountains, and seek ways that he may cross them.

Medicine has come to its present position by a long road from the beginning of man's consciousness. Progress continues in scientific developments at a greater pace than at any time in all history, and faster in America than in any other place in the world. I wish I might discuss further the newer developments and some things apparently just in the offing. At no time has medical research been so well directed, so free to continue its investigations without the interference of ignorance or superstition—a freedom earned by long years of struggle. Human life has been lengthened, been made more free from disease, happier and more productive, and the progress of civilization has been made possible by the investigation and courage of medical men. That progress has, moreover, been attained by the initiative of medical men and not by direction of social forces of political government. Standards of medical education and practice have been elevated by the medical body itself, to a level generally higher than that of any other profession.

If progress is to be measured on the basis of contribution to the causes of humanity, it may be noted that charity has been given by its members on a proportionately broader scale than that contributed by any other social group. In fact, it has

not been proved that any substantial proportion of society has at any time suffered through failure to obtain needed medical care because of the refusal of medical men to give that service. Medicine, throughout the ages, has maintained a discipline of ethics safeguarding the interests of those to whom service is rendered. There is no comparable code in any other profession.

Despite this history, there has been much propaganda within recent years, emanating from certain social welfare agencies, alleging that adequate medical care is not available to a large portion of the population because of its inability to pay for such service. An effort has been made to make it appear that medical practice must be changed and that opposition to such change constitutes selfishness on the part of the medical profession. Socialization of medicine and compulsory sickness insurance are advocated. Strangely enough, little attention has been given by these social service groups to the adequacy or quality of medical care provided by the already socialized public service, through trustees or county agents responsible for the care of the indigent. Many of these unfortunates have been cared for gratuitously by private physicians, because the socialized public service which should have cared for them has broken down from inborn political weakness or has, for financial reasons, absolutely refused to meet its obligations. It has been suggested that social propagandists, recognizing that taxpayers oppose additional direct taxes, have feared to advocate improved indigent care but may have planned to lead the public to assume indirect taxes, not readily apparent, to the total of a much larger amount, to support greater proposed socialized schemes. Also, large taxpayers are frequently substantial contributors to social welfare funds and would not approve expensive impractical socialization projects to be paid from local taxes.

To the group whose low earnings and economic distress are given as a reason for this propaganda, a philosophy of renunciation is advanced—to obtain security, it is held, you must give up your freedom of action. You must be regimented into compul-

\* President's address presented at the South Bend session of the Indiana State Medical Association, October 7, 1936.

sory contribution from your already inadequate earnings, to support certain state machinery substituted for your normal liberties and freedom of medical choice. To the physician, it is held that to have security of livelihood in the practice of your profession you, too, must be regimented as to service to be given and as to compensation for that service. You will be responsible to political appointees, and dependent upon them for position and opportunity in your professional life. Selected from the political failures of other nations, this dogma has been advanced as a new order. Some physicians, frequently those who have not actually treated the poor or known the whole problem, have accepted and spoken for such measures.

It is difficult to conceive of a present background for this philosophy, against which society so long struggled and finally gained its freedom, and which is now being advanced as new. Walter Lippman says that, "Though despotism is no novelty in human affairs, it is probably true that at no time in twenty-five hundred years has any western government claimed for itself a jurisdiction over men's lives comparable with that which is officially attempted in the totalitarian states." From some such states is taken the pattern which is proposed for us. It marks a complete abandonment of ages of "struggle to separate the church from the state, to emancipate conscience, learning, the arts, education, and commerce, from the inquisitor, the censor, the policeman, and the hangman." To those who think this picture is overdrawn, it is suggested that they investigate the official regulations which apply to the practice of medicine in some of the countries pointed to as having desirable government-controlled systems.

What is the individual social or economic malady which is responsible for the state of individuals who work, and for that labor do not receive a sufficient income to procure the necessities of life, including needed medical service? Given an individual of good health, intelligence and training sufficient to qualify for a job at which he is steadily employed in a productive capacity, for which he is not paid a sufficient amount to maintain healthful living conditions it is obvious that the fault does not lie with him, but somewhere in the economics of the society in which his productive labor is absorbed. I would not attempt to trace the various factors which may have to do with that unhappy state. However, it must be recognized that: We are no longer a nation of individual farmers, shopkeepers, or small manufacturers, but that the larger portion of those whose problems we are discussing are employed and that, in general, wage levels are fairly uniform in given industries and are more or less fixed by the practice of the larger employers in those industries. Much responsibility, therefore, rests upon these industrial executives who must meet competitive prices for manufactured products, satisfy a composite impersonal stockholder group who demand

profits and at the same time provide a fair compensation for those who labor in producing the merchandise.

There is, however, this to consider—sickness, and especially disabling disease, is much more frequent in the low-income group than in those of better financial station. Repeated sickness of employes is costly to large manufacturers, in labor turn-over, diminished output, and in incidence of compensable industrial disease. It must be recognized that the individual whose living conditions are unfavorable to health, lives and works at a less effective level than the individual who lives under more healthful physical and psychologic conditions. A man cannot give a dollar's worth of work if his physical condition is capable of only fifty-cent production. The number of employes in the greatest need is not so large, and it is probable that reducing these losses might go a long way toward meeting the costs of the moderate wage increases necessary to make better living conditions possible for the very low income group. It would also be favorably reflected in diminished sickness dependency in public institutions which constitute a considerable tax burden. Good medical care cannot keep the individual well and capable of effective work when unfavorable living conditions make this impossible. Regimentation for the purpose of securing medical care of poor quality is a cruel substitution. Proposals for the political control of medical service would extend that regimentation to the physician who gives the medical care, suppressing him to the level of the inadequate living provided by the political distribution of funds deducted from the employes' earnings, and quality of service would deteriorate.

Schemes for supplying medical care by contracts between employers, or employes, and doctors do not improve living conditions and frequently tend to commercialized service. Given a living wage, the employe will select his own physician. For fees within his capacity to pay, he will get a dollar's worth of medical care for his dollar, and more than half of it will not be consumed in administration of governmental machinery, as is reported in foreign countries. London newspapers recently announced that in addition to overcrowded and unhealthy living, half of England was going hungry—this, despite an insured medical service. It is apparent that insurance means that in addition to poor living, poor housing, poor opportunity, the employe is insured in perpetuity of poor medical service.

If legal measures are necessary to give security of medical service to the individual whose increased sickness and subnormal physiologic and psychologic state are the result of low income and unhealthful living, would it not be better to direct attention to an economic adjustment which would make regimentation for security unnecessary?

To simply record other medical and social problems born of general social and economic stress, and processes of readjustment would serve no purpose. To attempt to submit an analysis and critical summary of all the factors which influence medical progress would be impractical. To give assurance of what the future may hold for the practice of medicine would be impossible. However, from all the mass of evidence and conflicting trends, certain underlying principles may be made out, and from these hazy and insufficient premises it may be possible to project a course into the future.

First—To consider the status of the profession in its essentials, briefly: The medical profession is engaged in giving a highly specialized service, involving physical and psychologic treatment, required by everybody sometime in life. It is a service which only the specially trained individual, the physician, can give. Because of its highly technical character, the untrained individual is unable to judge of its quality or adequacy. It must be free from political interference and must be fairly compensated. The responsibility of the medical profession is, therefore, embodied in two basic requirements—the best quality of service, and honesty in its practices. The maintenance of some uniformity of standards is required.

Therefore, organized medicine must continue to exert its efforts to maintain a desirable level of undergraduate training, having in mind that medical training should have sufficient clinical and social guidance to prepare the individual for the social environment in which he will practice. Graduate education and encouragement to study are of equal importance. The habitually careless and incompetent medical man is a menace to the public and an undesirable reflection upon the profession. Interval examinations, to determine fitness to continue practice, or discontinuance of license on evidence of incompetency, through the legal integration of the entire medical profession, have been advocated by some. Through integration of the entire profession in a medical organization, every graduate of a medical school on being licensed to practice would automatically become a member of the medical organization. If his membership were discontinued for medical or ethical reasons, his privilege to practice would be automatically withdrawn.

Improvement of the profession to public contact will be helpful in developing a consciousness of what a good medical service means to the community. The basis upon which organized medicine would cooperate with lay organizations should be defined. Upon broad principles must be maintained the place of medicine in the social structure, the scientific standards of its work, a proper availability of its service, the level of its ethics, the honesty of its economic practices, and in keeping with these, the promulgation of its right to fair compensation for the quality of service rendered.

But the development of medical activities along these principal lines is not to be expected from spiritual endowment or the result of chance. Obviously, effective organization and competent leadership are needed. The building of strong medical societies and training of leaders must, therefore, be emphasized.

Second—The requirement of the public is essentially that: It should have the best possible medical service, free from political, social, or sectarian interference, available to everyone within his ability to pay. The financial basis must, however, be sufficiently attractive to men of such ability as to make good service and progress possible, having in mind that a proper fee for a prepaid unlimited medical service could not possibly be predicted or legally fixed. The actual need or possible abuses by neurotic individuals or the cost of the application of new methods of diagnosis and treatment, developed in the rapid progress of science, cannot be predetermined. Insufficient fees will inevitably be destructive to the quality of service. It must be recognized that good medical service entails more than a brief physical examination, a surgical operation, or dispensing of medicine, but includes also advice as to living. Problems of adaptation to a complicated civilization—social stresses and the tempo of modern life require the attention of trained medical men to avoid consequences more costly to the individual and the public. This cannot be secured in a disinterested, politically controlled service. Reduced to its basic terms, the requirements of the public are identical with those of the profession—the need of the best medical service as before defined, free from political, social or sectarian interference—for compensation which is fair to both the patient and the physician.

The public, made up of millions of patients, will in the end determine what kind of medical service it will have, but it will need advice. The individual patient can be most fairly advised as to his best interest by that individual who knows his interest most intimately, his physician, provided only that the physician is willing to state his own self-interest on a basis of giving his service fairly, value for value. This spells only common honesty. The patient has reason to have confidence in his physician. Such as are not worthy of this confidence may well be excluded from medical organizations as their membership is not in keeping with a long and prideworthy tradition.

Third—Social service, which has grown to its present position within the professional life of the active physicians of today, was developed as a result of the failure of social government and economic organization to provide an adequate living for a certain group unable to look after its own interests or to exert sufficient pressure to enforce its demands. Social service ministrations for a long time were limited to a sort of vicarious adjustment by way of charity, for these social and economic shortcomings. In some instances it has

been established by employers as a means of stilling unrest and a rising tide of demand for a more equitable distribution of profits created by labor. However, I am happy to say, much social service has been carried on by certain kindly individuals whose generosity was directed by constructive ideas of helpfulness to those less fortunate. The humanitarian appeal of sickness caused many of these efforts to be directed along medical lines. Social service is, however, young and untried in its experience and in considering medical care, it disregards the necessarily individual character of medical service in its enthusiasm for a politico-economic substitute.

These social interests in sickness may result in additional social legislation, and medical organization must be prepared to advise and mold such efforts along lines that are practical, helpful, and not inconsistent with the best interests of the public. Medicine has its enthusiasts who grasp socialized medicine as a new order, without examining its history—despairing prophets whose possible helpfulness is nullified by repeated prediction of defeat—and promoters who think they see a possible advantage in the commercialism which has characterized the application of these plans in other places.

It is significant that in these various promotions, while the availability of medical service is sometimes mentioned, the service is sold on the basis of reduced cost, and in no instance has high quality of medical service been stressed or for that matter attained.

Hospital insurance, by hospitals, although much talked about, is admitted by its most earnest advocates to cover in all less than three hundred thousand people. It is as yet an experiment without sufficient trial or actuarial information to determine its financial practicability or safety. Accumulating evidence suggests that present rates are insufficient, but there are manifest weaknesses, and the next step is uncertain. There is a temptation for hospitals in financial distress to encroach more upon the practice of medicine in an effort to readjust for past financial errors.

Contracts have been offered for medical service at reduced rates, to be extended to employes of certain industries, solely because of their employment in that organization and without regard to income. In one instance a strike was settled when an employer "threw in" medical services to the employes. In some other instances, similar proposals were dropped by employers when workers went out on strikes.

The implication is obvious—medical service would be used as a pawn in the readjustment of wage scales, if medical men became so forgetful of the harmful effects of these practices as to accept such proposals. In many instances such contracts would be in violation of ethical restrictions as defined by the Judicial Council.

Fourth—Government is not usually interested

in changes for which there is general public appeal, although at times government may entertain suggestions of various groups who make it appear that there is a general demand for such legislation. Lay groups, having great political influence, as well as those who would receive the service, do not wish changes in medical service.

In conclusion—After the above factors of government, social service agencies, employers, the individual patient, and the physician, have been specifically evaluated, it is evident that the future will be largely determined by the individual and his doctor. In this the physician bears the responsibility of advising his patient as to the patient's best interest. The individual should know, before he considers accepting regimentation in return for medical security, that in the experience of other countries that security is neither real nor permanent and tends eventually to a degradation of medical service.

Medical organization should emphasize the fact that sickness has social and economic aspects that are much broader than simple medical care. A disordered economic state, which reduces the individual to an inadequate basis for healthful living, should not be made the excuse for the application of expensive and destructive regimentation, as a substitute for necessary, broader readjustments.

The profession must strive to its utmost to preserve its personal liberty in the interests of those who are unable to judge for themselves—and, for the preservation of medicine which, throughout the ages of rising and falling governmental philosophies, has maintained its position of individual relationship and freedom, and devoted its energies to the lengthening and enrichment of life.

The history of medicine reaches into the farthest-known antiquity, and in its richness holds the story of the spiritual, mental and physical progress of mankind. It has given service to all peoples, and its members have stood close to the individual in the soul-trying emergencies of life, ministering equally to everyone. Somehow, that spirit of service still lives. It has, without compensation, cared for the blind and the crippled when the various governments permitted them to live on alms or starve.

The greatest age attained by any national machinery which could be dignified by the name of government is but a very short lifetime when compared to the age of the profession of medicine. But throughout all periods of governmental failure and social disorganization, medicine not only continued to function but progressed in knowledge. Medicine survived all those ages of social chaos because it had its contact with the individual and not with the varying politico-social structures of government. More definite still, it survived because a certain individual physician was close to the heart of a certain individual patient, and by reason of that mutual confidence could better

(Continued on page 596)

## A CRITICAL EVALUATION OF RECENT ADVANCES IN CONTAGIOUS DISEASES\*

JOHN A. TOOMEY, M.D.

Cleveland, Ohio



*Dr. Toomey*

I have been asked to consider the specific prophylactic measures that are used to prevent and treat the various contagious diseases. It is obviously impossible to give more than cursory attention to the various points. Thus, if the transition from one subject to another seems abrupt, due allowances should be made.

The remarks which follow are based on the personal experience of myself, associates, and others who work in the same field. They appear logical to me at the moment although any intelligent man admits that subsequent evidence might modify his opinion.

### SCARLET FEVER

Susceptibility to scarlet fever is determined by the Dick test. This is performed by injecting intradermally in the forearm a small amount of scarlet fever streptococcus toxin. In 24 hours a susceptible individual will have a local inflammatory reaction, 0.5 cm. or greater in diameter, at the site of the injection. Occasionally delayed reactions will be seen, the inflammatory response coming on after 48 hours. This test is practicable and reliable, even though some individuals who have a negative reaction to the Dick test may get scarlet fever. One should remember this fact, although the number of these cases is so few that an individual may be considered as not being susceptible to scarlet fever if he has a negative Dick test. It should also be remembered that a person with a negative Dick test may lose his immunity and again become susceptible to scarlet fever just as a patient who has had scarlet fever may lose immunity and again contract the disease.

An individual who is susceptible to scarlet fever, as determined by the Dick test, may be protected. This is done by injecting weekly for five weeks increasing numbers of skin test units of the toxin that causes the disease. A Dick test should be repeated a month or so after the last injection. Most individuals, children as well as adults, will have a negative reaction very early after the last injection, often within eight or nine days after the fifth dose.

Occasionally, the five doses may not completely immunize an individual and a few more injections

of the last dose are given. On the other hand, if a Dick test is done after the fourth dose it often will be found negative and the fifth dose can be dispensed with. The immunity obtained is said to last at least from 3 to 7 years.

It is believed that this method of active immunization should be utilized for individuals who work in hospitals caring for patients ill with scarlet fever, for children in orphanages, preventoriums, nursery schools, for nurses, doctors, etc. One hesitates at the present time to urge this procedure as a general public health measure.

Reactions may occur after the injection of scarlet fever toxin, which may be local and general in character and sometimes very severe. One may decrease the number of skin test units per dose, thereby decreasing the possibility of severe reactions in susceptibles. However, such procedures only increase the number of doses to be given and it is difficult enough as it is to interest the public in the present method of injecting five doses.

I have had to stop immunizing nurses because of the reactions that sometimes occurred with even the smallest dose of toxin. Swollen joints which keep the individual in bed for a week, a rash like that seen in scarlet fever and extensive localized indurations are often seen in adults. In children, however, the severity of the reaction is distinctly less; thus, it is best to immunize in childhood and preferably during the pre-school age. If the reactions could be controlled active immunization would be a more popular procedure.

Despite the reactions there is no question in my mind of the efficacy of active immunization, since in a group of over 1,500 nurses which I immunized against scarlet fever, only five immunized individuals (three incompletely immunized) developed the disease, although from past experiences our expected morbidity in an equal number of unprotected nurses would be nearly 375 cases.

Some work has been done with formalized toxin, an attenuated toxin or toxoid preparation, but there are no conclusions as yet about this material.

To summarize, it is my opinion that active immunization should be given at least to members of the groups mentioned before. Should your patients wish active immunization and understand the possibility of reactions that may develop, there is no reason why this procedure should not be carried out.

It has been stated that the injection of scarlet fever toxin merely immunizes against the rash, but not against the organisms that cause the disease; that many individuals actively immunized may not have the rash, but that they may become infected with the organisms causing the disease and have the complications peculiar to this infection. My own experience does not bear this out. All nurses that complain of sore throats are admitted to our wards and there has been no relative

\* Presented before the general meeting of the Indiana State Medical Association at the South Bend session, October 8, 1936.

increase in the number of patients with streptococcus sore throats in this group.

If active immunization were of no value, it was only natural that passive immunization should be tried. Horses were injected with the scarlet fever toxin and an antitoxin or antiserum obtained which is now in general use. In evaluating its worth one should remember that scarlet fever is a disease with a decreasing mortality rate. In fact, the mortality is coming down and the morbidity is going up. Many people have died from the disease, but the relative number that now die as compared to the number who died 40 years ago is much less. The second thing to remember is the fact that most of the cases that die seem to die in spite of the use of scarlet fever antitoxin. If we analyze the reasons why our patients die, one wonders how it could be thought that they could be saved by any type of therapy. Of 7,000 cases of scarlet fever that we have cared for, about 75 have died. But few of the deaths were due to the toxicity we read about. Most of them were the result of sepsis. Over 90% of our deceased patients had nasal passages plugged with secretion, secondary sinusitis, and often ear and lymph gland infections. Many physicians seem to think that giving antitoxin is all that is necessary. They forget that sepsis secondary to localized infection in the nose may come on at a time even when there has been plenty of antitoxin present in the blood stream. If I had to choose between antitoxin and other therapies in treating these individuals, I would content myself with keeping the nasal passages free by suction and gentle swabbing. However, in patients who are desperately ill, I would not withhold its use. On the other hand, I have a great deal of faith in convalescent serum, and give from 50 c.c. to 100 c.c. intramuscularly.

What about the individual who is exposed to the disease? Even when directly and intimately exposed, not all people get scarlet fever, and my experience, at least, does not warrant the conclusion that an injection of scarlet fever antitoxin will prevent the occurrence of the disease in a susceptible individual. Why follow a procedure that may produce serum sickness and make the injected individual sicker than the person ill with scarlet fever to whom he has been exposed?

Commercial laboratories are conscious of the fact that there are reactions following the use of scarlet fever antitoxin. Serum sickness has occurred in 75% to 80% of our treated groups. Recently one of the laboratories prepared their serum so that the scarlet fever antitoxin produced is free from some of the elements causing reactions. We have used some of this material and had a 25% reaction rate, a decided reduction. Others have had an even smaller reaction rate with the same antitoxin. Such an antitoxin should be tried out and its worth determined.

#### DIPHTHERIA

To prevent diphtheria, the use of toxin antitoxin, toxoid or alum precipitated toxoid is advised.

Adults are supposed to be given toxin antitoxin because they react to toxoid, and children, toxoid or precipitated toxoid because they have few or no reactions to this material and because they are not sensitized to horse serum as they would be if toxin antitoxin were used. It is thought that in this way trouble would be avoided in case other horse serum antitoxins had to be used later for some other disease contracted by these children. It seems to me that the second reason should apply to adults also, since most individuals who are immunized belong to the medical profession and are just as apt to contract an illness subsequent to immunization that might require the use of some horse serum therapy.

Which material shall we use? Personally, I think it best to learn how to use and to know the advantages and disadvantages of one type of prophylaxis for all groups. There may be reactions, but you can avoid most of them by increasing the number of doses and decreasing the amount injected at any one time. My own experience with alum precipitated toxoid is not so conclusive as the experiences of others seem to be. I did not find that one dose immunized our susceptible nurses, nor did I find that injections of alum precipitated toxoid were unaccompanied by reactions. At the present time I am using toxoid exclusively. We give 0.2 c.c. subcutaneously to adults in order to gauge the reaction. If there is no marked response, we give 0.3 c.c. about two weeks subsequently and one c.c. two weeks following the second injection. In children, we start off with 0.5 c.c. and then give 1 c.c. two weeks later. There is good evidence that a longer time interval between doses from 2 to 3 weeks may give better results, hence one does not need to worry about the length of time elapsing between injections. In over 90% of the cases, a negative Schick test will be found in less than two months following the last injection, while after the injection of toxin antitoxin, it may take nine or ten months, or even a year for immunity to develop. I see no good practical reason for using toxin antitoxin any more. I would object to the use of alum precipitated toxoid in bulk, since you can't tell the difference between a vaccine bottle filled with vaccine, a vaccine bottle filled with live organisms and one filled with alum precipitated toxoid. If it is to be used, it should be dispensed from individual vials and given in the same way as you give toxoid. The reactions to toxoid as with alum precipitated toxoid mixtures are mostly local and soon disappear. Toxoid material has this advantage—it is clear. The physician can tell at a glance whether he should or should not use the material.

All adults should be tested before immunization and both children and adults should be Schick

tested some months after immunization in order to determine whether immunity has been established. If the test is still positive after six months, another course of injections should be started. Active immunity lasts a long time.

There has been a drop in the number of diphtheria cases in the United States. Not all this is due to the efficient prophylactic measures employed; some of it may be attributed to the fact that we are in the midst of a diphtheria depression. Like any other disease, diphtheria has periods when it waxes and wanes. So few cases were recorded at the turn of the nineteenth century that clinicians thought it to be a new disease when it again became epidemic. Lately there have been indefinite signs, reports here and there of the finding of a much more severe type of diphtheria, the so-called diphtheria gravis. This is important because all of the diphtheria antitoxin in this country is made by using Park No. 8 bacillus and a different diphtheria strain might necessitate different therapeutic antitoxins. Recent experiments have shown that the ordinary antitoxin may be used to treat individuals infected with the severe strain, but mammoth doses have to be used. If a case is toxic, the blood pressure down and the individual not reacting as might ordinarily be expected, mammoth doses of antitoxin should be given, even as much as from 100,000 to 200,000 units. "Diphtheria gravis," as it is called, is severe in its effects. We have had a few cases, and it has been described in England, Germany and in some parts of the United States.

A patient ill with diphtheria should be given enough antitoxin at one time if possible, enough morphine to keep him quiet (bearing in mind the morphine susceptible case), and in general treated with scientific neglect.

Passive immunization has been recommended for individuals exposed to diphtheria. We never give antitoxin to such individuals if we see them daily, but in country practice such a course may be advisable.

#### MEASLES

Measles may be prevented by the use of convalescent measles serum. From a practical standpoint, however, one should not wish to prevent measles, but to attenuate its severity so that the patient will get a modified attack of the disease and, possibly, permanent immunity. If you try to prevent the disease, you may succeed, but the patient is thus passively protected for a few weeks only, and when he is re-exposed after that time is up, he again becomes susceptible and must be reinjected. Five or six c.c. of convalescent measles serum injected six or seven days after initial exposure usually modifies the attack. Ordinarily, it is presumed that the initial exposure has occurred a few days prior to the appearance of the rash in the child to whom the patient has been exposed. When measles is modified there is but

slight or no rhinitis and the rash may be sparsely distributed.

If you do not have convalescent serum, adult serum has been recommended. Although this is of questionable value, it may be used in amounts of from 20 c.c. to 25 c.c. injected intramuscularly.

There are no reactions following the use of human convalescent serum. No attention need be paid to blood typing should you desire to inject convalescent serum into the muscle or the peritoneal cavity, although I believe that all convalescent serums should be typed against cells if injections are to be made intravenously. After intramuscular injection, the reaction is slight. To avoid a sterile abscess no more than from 10 c.c. to 15 c.c. should be injected at any one spot.

Obviously, it is at times difficult to secure convalescent measles serum. McKhann and Chu have purified placental extracts, and have obtained an immune globulin fraction which they have used to prevent and modify measles. Two c.c. of this material is injected intramuscularly six or seven days after exposure in order to modify the attack. There may be local reactions about the injection, and even fever. The evidence seems to support the contention of McKhann et al. that the use of this material will modify an attack of the disease. When convalescent measles serum is available, however, it should be used in preference to the immune globulin.

#### MUMPS

From 20 c.c. to 30 c.c. of convalescent mumps serum injected intramuscularly may be used to prevent mumps or to modify the complications. There is good statistical evidence to show that it will prevent orchitis if given early enough. Teisser gave 172 male patients 20 c.c. of serum intramuscularly and about 8% of them developed orchitis; 174 cases were taken as controls and nearly 24% developed the complication. Hess was able to stop an epidemic of mumps in an institution by injecting all the exposed susceptibles with from 5 c.c. to 6 c.c. of convalescent mumps serum immediately after exposure.

#### ERYSIPelas

Erysipelas vaccine has been recommended. It is given to patients who have been ill with erysipelas since these are the individuals that are apt to have recurrences. I do not use the vaccine, since I do not believe that it has been proved that erysipelas is a toxic disease in the same sense that scarlet fever is. I believe that it is a form of allergy. It may surprise you to know that most individuals who contract erysipelas have plenty of antitoxin in their blood serum at the very time they contract the disease; nevertheless, they get the disease.

Erysipelas is a disease that is well borne in the well and fit. Although the mortality rate may be 10% and more, it is my experience that any healthy individual who does not have an immediate previous history of some acute infection, like influenza

and whooping cough, etc., any healthy individual who hasn't an organic lesion of the heart, kidney or lung, who is not a confirmed alcoholic, and who is not in the puerperal period, will get well no matter what is done or how many attacks or spreads of the erysipelas occur, and no matter what treatment he may receive. It is obvious, then, that the taking of a good history and a meticulous physical examination will be of greater value than a lot of doubtful therapy. I don't think erysipelas antitoxin does any specific good, although it may be of some non-specific value. It has not stopped the spread of the disease in the patients treated at our hospital. Curiously, however, this is one antitoxin that does not seem to give very many reactions, and on the theory that it may do some good and that it can't do any harm, it might be used.

#### WHOOPING COUGH

It has been stated that if you inject whooping cough vaccine into susceptibles, you may not lessen the morbidity rate, but that you do have some decrease in the mortality rate. In order to better immunize individuals, larger doses of whooping cough vaccine made from freshly isolated strains of organisms grown on human blood agar have been advocated by Sauer. Krueger advocates the use of a bacterial endo-antigen. I don't think you can promise that the patient won't get whooping cough if you employ either of these antigens. We have seen patients who developed whooping cough within six months after a full course of injections.

Recently Doull, Shibley and McClelland reported that they tried freshly isolated organisms as a vaccine in about 500 children. Five hundred other children in the same families were used as controls. They found that there were as many who developed the disease in the protected group as there were among the non-protected controls. They felt that there might have been some attenuation of the attack in the protected individual. I think that it is an unproved assumption that if the patient does get the disease, the attack will be minimized or not be so severe. This impression, however, is held by many good clinicians. After a study of 1,500 proven cases in our wards and elsewhere, I would hesitate to accept any comments on modification since the disease itself is so variable.

Much has been written about freshly isolated strains for vaccine material, etc. These strains are isolated during the first stage of the disease. Later, when the patient starts whooping, these so-called "phase I" organisms are difficult to find. Clinicians all realize that the whoop is caused by the thick, tenacious material in the bronchi and trachea. Freshly isolated organisms do not produce such a material. I have isolated a sticky mucoid material from the so-called "phase IV" organisms. This I have called "pertussis exudate mucoid." It is the same material coughed up by

the children after the whoop appears. This bacterial exudate which has not been described previously could be compared to the diphtheria toxin produced by the diphtheria bacillus. In about 100 patients with whooping cough, it has apparently modified the course of the disease. Further reports will be made later.

When children have the disease and are very ill, what may be done? From 10 c.c. to 20 c.c. of convalescent whooping cough serum has been recommended for therapeutic purposes. I do not think that the value of this serum has been definitely demonstrated, but it is a general opinion that cases thus treated seem to fare better. We have never seen the slightest benefit obtained from the use of commercial vaccines after the patient has contracted the disease.

#### MENINGITIS

Meningitis is a disease of a high mortality rate and until recently there was no satisfactory method of treatment. About four or five years ago, Ferry described a meningococcus toxin. Parke, Davis & Company now put out a product that is supposedly not only antitoxic, but antibacteriocidal as well. Hoyne, of Chicago, has given enthusiastic reports about its use intravenously. Recently I have had excellent results with the antitoxin made by Parke, Davis & Company. Many of our cases have been treated only intravenously and intramuscularly with complete cure.

It is not good practice to give meningitis antitoxin or antiserum to exposures, since the number of exposures who contract the disease are comparatively few indeed.

#### ENCEPHALITIS

From 20 c.c. to 30 c.c. of convalescent encephalitis serum injected intramuscularly has been recommended, but there is no definite evidence that such therapy is of value. There is no known method by which susceptibles can be recognized. Since the morbidity rate and the contagious index are low, it is not practicable to inject exposures with any therapy.

#### TETANUS

A thing of definite interest to many is the fact that you can now immunize individuals against tetanus by the use of tetanus toxoid. This is given the same way as diphtheria toxoid.

#### POLIOMYELITIS

Brodie and Kolmer have described poliomyelitis vaccines. Brodie's experiments have not been confirmed by others. It is well known that the injection of monkeys with unattenuated vaccine will protect them from a subsequent injection of the virus. Kolmer uses sodium ricinoleate to attenuate his vaccine, but there is grave doubt as to whether he has ever accomplished this result. No vaccine should ever be used which is not safe and my opinion is that the latter (Kolmer's) at least is unsafe. Leake has described cases of polio-

omyelitis which he feels are directly attributable to the use of vaccine material.

Of what use is convalescent serum in poliomyelitis? Theoretically, it is only of value when you inject it in the preparalytic stages, or in the early stage of the disease. After that, its value is questioned. However, the consensus is that although convalescent serum has not been proved of unquestionable value, either experimentally or otherwise, it should nevertheless be used, but in larger amounts than heretofore—from 50 c.c. to 100 c.c. intramuscularly. Alum or tannic preparations are now being injected into the noses of exposures on the theory that since the disease enters by way of the olfactory nerves, and since it has been shown that such chemicals block the passage of virus introduced intranasally in monkeys, the disease may be prevented in the human. The presumption is that in the human being the virus enters the system by way of the olfactory bulb. I believe that enough evidence has been collected to question this fundamental concept. Believing as I do that the virus enters by way of the gastrointestinal tract, I do not see how intranasal sprays will prevent the occurrence of this disease in human beings.

#### SMALLPOX

A new vaccine virus which is artificially cultivated on the chorio allantoic membrane of the chicken egg has been recommended. There is no evidence presented thus far that it is any better than the calf vaccine we now use. In fact, some doubt exists as to whether it produces as many takes.

One need not worry about the postvaccinal encephalitis cases recently described occurring after vaccination. Only a few cases occur in millions of vaccinated individuals and even these few may be avoided if vaccination is carried out during infancy, at a time when there is usually no susceptibility to this condition.

#### TYPHOID FEVER

The only recent advance in the preparation of typhoid vaccine has been that paratyphoid A and B organisms, considered by many as the material in the triple vaccine which causes the reactions seen after its use, have been left out and many are now using only the straight typhoid vaccine and giving an injection each year at the end of spring.

#### RABIES

Whether one should use rabies virus made after the method of Semple or Cummings has not been decided. Rabies vaccination may not always protect and post-rabies paralysis may occur as a result of the treatment, but such cases are so few in number that for practical purposes we can ignore them and we should not hesitate to use this material when needed.

#### ACNE AND BOILS

Staphylococcus is now used to immunize individuals who have acne or boils caused by that organism. This is used in the same manner as diphtheria toxoid. A staphylococcus antitoxin is now in the market for the treatment of individuals having staphylococcus septicemia, but its value has not been established as yet. A mixed streptococcus and streptococcus bacteriophage has been described and where the focus of infection is in the skin, in an exposed bone, or in a sinus, some valuable results may be obtained from its use.

#### CHICKENPOX

Vaccinating exposures with the contents of the vesicles of chickenpox has been recommended as well as convalescent serum to protect immediate susceptibles. Neither procedure is practicable. The best procedure to follow with chickenpox in a family is not to try to protect but, after the original patient has remained in bed for a day or so, let him out and expose all of his brothers and sisters so that they will contract the disease, also. This is what happens anyway in practice, and I don't see why we shouldn't admit that *quarantine for this disease is a waste of time, effort and money and is very impracticable*.

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#### ABSTRACT

#### ROLE OF ALCOHOL IN CIRRHOSIS OF LIVER: CLINICAL AND PATHOLOGIC STUDY BASED ON FOUR THOUSAND AUTOPSIES

RUSSELL S. BOLES and JEFFERSON H. CLARK, Philadelphia (*Journal A. M. A.*, Oct. 10, 1936), state that in recent years there has been growing an increasing tendency to dispute the status of alcohol in the development of cirrhosis. It was with this in mind, especially, that the present investigation was undertaken. We wished to determine the incidence of cirrhosis of the liver, based on histologic evidence, as it occurred in a large general hospital—the ratio of age, sex and race, and, more specially, the relation borne to the disease by alcohol and the acute infections, and by syphilis, diabetes and tuberculosis. For this purpose 4,000 autopsies were studied. From an analysis of 4,000 consecutive autopsies performed at the Philadelphia General Hospital during the period from March, 1933, to July, 1935, they concluded that diabetes, syphilis, pulmonary tuberculosis and the acute infectious diseases, as well as such gross lesions in the digestive tract as ulcer, carcinoma and gallbladder disease, do not bear any relation to the incidence of cirrhosis. It is further concluded that alcohol cannot be regarded as a specific factor in the etiology of cirrhosis. As the lesion defined as portal cirrhosis occurs under influences unassociated with alcohol, the authors would suggest abandonment of the term "alcoholic cirrhosis."

## HEAD INJURIES

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It is not possible to span briefly the entire subject of head injury. Therefore, this discussion is limited to those points that seem to be of most importance. These points are the ones that determine early fatality or post-traumatic sequelæ. They constitute the serious immediate effects of head injury, and they are four in number:

- (1) Shock.
- (2) Increased intracranial pressure.
- (3) Intracranial hemorrhage.
- (4) Infection.

In the great bulk of cases of head injury, they are of little or no significance. In a second small group of cases, they lead to a fatal outcome rapidly and unavoidably. In a third group they are all-important because in this group fatality may be averted by their prompt recognition and skillful treatment.

### SHOCK

Shock following injury to the head must be recognized because, when present, it provides the first indication for treatment. Its presence contraindicates the performance of any operative procedure until it has been controlled. The signs of shock occurring after head injury are much the same as those of shock from any other cause: prostration; cold, clammy skin; subnormal temperature; low or fluctuating blood pressure; weak, rapid, thready pulse, and shallow respiration.

### INCREASED INTRACRANIAL PRESSURE

Increased intracranial pressure is one of the most serious early appearing consequences of injury to the head. It is caused by cerebral edema or by massive intracranial hemorrhage, or by both. Most frequently its cause is cerebral edema alone. It demands attention urgently because when of high degree, it obstructs circulation through the medulla and leads to medullary collapse and death. The clinical signs of increasing intracranial tension are fairly clear-cut and should be well known. They are: increasing stupor; rising blood pressure; slowing of the pulse rate, and slowing of the respiratory rate. In rare instances to these may be added papilledema. Lumbar puncture with manometer shows the cerebrospinal fluid to be under increased pressure—above 12 mm. mercury or above 150 mm. water. The signs of a collapsing medulla are: rising temperature, falling blood pressure, a weak, rapid, irregular pulse, and irregular respiration. When these signs develop after injury to the head, fatality is imminent, and active intervention imperative. It is necessary in every case of severe head injury

to make frequent determinations of the pulse, respirations, blood pressure and temperature because collectively they give much valuable information as to the state of intracranial pressure and how well it is being borne. Occasionally it is difficult to distinguish between cerebral edema and intracranial hemorrhage as the cause of a rising intracranial tension. As a rule, edema is a diffuse process and occurs without signs of focal brain lesion. Intracranial hemorrhage, on the other hand, is very likely to manifest signs of focal cerebral involvement.

### INTRACRANIAL HEMORRHAGE

The possibility of the occurrence of intracranial hemorrhage after injury to the head should always be considered and special search made for its signs. If diagnosed promptly and treated properly, surgically it represents one of the most favorable neurosurgical lesions, but if not recognized it almost always leads to fatality. Hemorrhage may be extradural, subdural, intracerebral or subarachnoidal. Clinically, its presence is suggested by increasing stupor or by the late appearance of stupor after a lucid interval, and by the development of signs of focal cerebral lesion.

Extradural bleeding results most frequently from rupture of the middle meningeal artery, which occurs occasionally in association with linear fractures of the temporal bone. A rather characteristic syndrome is produced. This consists of recurring stupor after an interval of clear consciousness, enlargement of the pupil on the side of the hemorrhage, the appearance of focal Jacksonian twitches on the side opposite to that of the bleeding, and finally the development of paralysis of the opposite limbs. The paralysis appears first in the face, next in the arm, and last in the leg. Since the hemorrhage is entirely extradural, blood is not found in the cerebrospinal fluid upon lumbar puncture. Usually the signs of hemorrhage appear within a few hours after the head injury. Immediate operation is indicated.

Subdural hematoma, unlike extradural hemorrhage, first gives evidence of its presence many days after an injury to the head. Typically it becomes manifest a week or two after the accident, but its signs may not appear until after many weeks or even months have passed. Its cause is rupture of one of the veins crossing the subdural space enroute to a large intracranial venous sinus. A clot of variable extent and thickness develops in the subdural space and overlies the cerebral hemisphere in the fronto-temporo-parietal region. The clot may be so large that it depresses the cerebral hemisphere an inch or more from the inner surface of the skull. In about 40% of cases the bleeding is bilateral. Clinically subdural hematoma is manifested by extremely severe headaches and by dilatation of the pupil on the side of the hemorrhage. To these signs may be added some weakness of the contralateral half

of the body with increased tendon reflexes and a positive Babinski reflex, possibly Jacksonian convulsive movements on the contralateral side, and possibly some aphasic disturbance if the clot occurs over the left hemisphere in a right-handed person. Papilledema may be seen if the clot is large and of long-standing. Inasmuch as the bleeding occurs into the subdural space external to the arachnoid, fresh blood is not found in the spinal fluid on lumbar tap. Occasionally, however, the spinal fluid may be a little yellowish. Subdural hematoma may appear after the most trifling injury to the head—a point that should be constantly borne in mind. Its occurrence is much more frequent than is generally believed. From the operative standpoint it is one of the most favorable lesions occurring within the skull. Its presence is an indication for immediate operation. Operation may not be long delayed for sudden death may occur at any time. In cases in which the diagnosis of subdural hematoma is doubtful, an exploratory burr hole should be made in the skull, the dura opened, and the subdural space inspected.

Intracerebral hemorrhage is not an infrequent complication of injury to the head. The bleeding occurs into the cerebral substance and is probably the result of venous rupture. Clinical signs appear usually within a few hours after the injury. There occurs an increase in stupor or stupor develops if consciousness has already been clear. If functionally important areas of the brain are affected, focal neurological signs will appear—hemiplegia, cerebral monoplegia, etc. It is not always possible to differentiate these clots from subdural or extradural hematomata, and, therefore, in every case exploratory operation should be performed. Not infrequently it is possible to localize the clot and evacuate it with improvement in the disability it has caused.

Subarachnoidal hemorrhage occurs often in severe head injuries. It is manifested clinically by headache, marked restlessness and delirium and the signs of meningeal irritation: nuchal rigidity, and positive Kernig and Brudzinski signs. It can only be diagnosed with certainty by the finding of gross blood in the spinal fluid upon lumbar puncture. In subarachnoidal hemorrhage if the fluid is centrifuged immediately after puncture the supernatant fluid will be xanthochromic from diffused blood pigment. If the blood in the spinal fluid is the result of trauma at the time of lumbar puncture, the supernatant fluid will be colorless. A lumbar puncture should always be performed when subarachnoidal hemorrhage is suspected.

#### INFECTION

Infection is the fourth serious complication of head injury. It may involve the scalp, the skull, the brain or the meninges. Most frequently it is the direct result of delayed or improper treatment

of open wounds. Occasionally, as in post-traumatic brain abscess, it occurs from the implantation of contaminated material into the brain at the time of penetrating wounds of the skull, comminuted or compound fractures. Infection of the scalp and osteomyelitis of the skull can lead to prolonged disability, meningitis is almost invariably fatal, and brain abscess frequently so. It follows, therefore, that every effort must be made to prevent the occurrence of infection. This can be accomplished only by the early and thorough debridement of all wounds.

#### MANAGEMENT OF A CASE

In the management of a case of head injury, there are two fundamental subjects to consider: (1) study of the case, and (2) active treatment.

When studying the case, the following points merit consideration: (1) the history; (2) examination of the head; (3) neurological examination; (4) fundus examination; (5) a general physical examination; (6) frequent determinations of the temperature, pulse, respiratory rate and blood pressure; (7) lumbar puncture, and (8) x-ray examination of the skull.

In taking the history, the points of chief importance are the time of onset of stupor and the presence or absence and time of appearance of neurologic symptoms. It is more important to learn these facts than it is to determine the circumstances of the accident. If these points could always be brought out clearly, there would be much less likelihood of overlooking a serious advancing cerebral edema or an operable intracranial hemorrhage.

Examination of the head should be thorough. The most important point in this connection is not to overlook a compound skull fracture, for to do so will mean failure of proper treatment and a strong probability of early intracranial infection. In all cases with laceration of the scalp, every effort should be made to make examination complete. This often involves clipping of hair and spreading apart the lips of the wound until the skull can be seen and palpated. The possibility of hemorrhage from the nose or ears should be investigated for such bleeding may signify a compound basal skull fracture. Leakage of cerebrospinal fluid from the ears and nose should also be determined.

A neurological examination is a prime requisite in every case of serious head injury. The intracranial damage far outweighs in importance that to the scalp or skull, and its presence and extent can only be determined by a careful and neurological check-up. Even in stuporous patients much may be learned as to the state of intracranial affairs. Particular attention should be given to the state of consciousness, the condition of the pupils, and the presence of signs of focal brain injury or irritation.

Examination of the ocular fundi will be productive only infrequently, yet inasmuch as papilledema occurs occasionally as a sign of increased intracranial pressure, the sign should be looked for.

A general physical examination should be made to determine the presence of associated injuries or the presence of pre-existing disease that might have some bearing on the treatment or prognosis of the case.

Ideally the temperature, pulse, respiratory rate and blood pressure should be determined every half hour and recorded. To do this is particularly valuable in cases of severe head injury with unconsciousness.

Lumbar puncture is both diagnostic and therapeutic. It may be used to diagnose with certainty the presence of subarachnoid hemorrhage and, combined with manometric pressure readings, it gives accurate data as to the degree of intracranial pressure. Therapeutically it is used to reduce increased intracranial tension.

X-ray examination of the skull should be made according to the judgment of the attending physician. Its chief value lies in the disclosure of compound, depressed and comminuted fractures. It has little worth in linear and basal fractures. The examination should always be made in all cases of open scalp wounds with possibility of skull fracture. No x-ray films should be made with the patient in shock. A satisfactory x-ray examination includes stereoscopic lateral films of both sides of the head, stereoscopic antero-posterior films, and stereoscopic postero-anterior films. In certain cases special detail films of particular areas of the skull will be desirable.

Much might be said in regard to the active treatment of head injuries. In general, conservatism is the rule, only a small percentage of cases requiring radical or operative treatment. It is impossible to outline a plan of treatment applicable to all cases. Each case must be handled as an individual problem and dealt with according to its own indications. Cases of severe injury should be in the hospital, where the facilities for proper treatment are available. Faithful, intelligent nursing is indispensable in serious injuries with intracranial complications.

The patient should be in bed in a quiet room. If restlessness is marked, sideboards should be attached to the bed or some form of mechanical restraint employed. If there is no shock, the head should be raised a little in order to help prevent the development of cerebral edema. If shock is present, it is well to lower the head. In order to provide a better airway, it is desirable to turn the head to one side. Frequent turning of comatose patients is necessary to offset the danger of pneumonia. This should be done every two or three hours. The question of nourishment is not important during the early days after injury. It is only necessary to provide a certain amount of

fluids. These, however, should be somewhat restricted in order to prevent cerebral edema. As a general thing, it is well not to give more than 1,500 to 2,000 ccm. of fluid per day. Nothing should be given by mouth to comatose patients.

Drugs may be used to control pain and restlessness, to provide catharsis and to produce stimulation. There is but one rule in regard to the employment of drugs and that is: never use morphine in any case of head injury. It is dangerous to give morphine because it may mask the symptoms of important intracranial complications, as extradural hemorrhage, and also because it tends to increase intracranial pressure. It is much better to attempt to control pain with codeine. The barbiturates are effective in allaying restlessness. If this latter, however, is caused by subarachnoidal hemorrhage, repeated lumbar drainage of bloody spinal fluid is a more effective treatment. If it is desired to produce catharsis, the saline laxatives are best. These have an added value in that they tend to counteract cerebral edema by dehydrating the brain. Stimulants are of little real worth in cases of head injury. Various preparations may be used—caffeine sodio-benzoate, coramine, and others. Of these caffeine is probably the best.

Shock is best treated by avoiding manipulation of the patient, lowering the head, and providing warmth and quiet. Blood transfusion may be necessary. Stimulants accomplish little.

Only a few measures are available with which to combat cerebral edema. They are: restriction of fluids, elevation of the head, the administration of hypertonic solutions intravenously, lumbar puncture, subtemporal decompression, and the injection of caffeine sodio-benzoate. There has been much discussion in regard to the relative value and perils of each of these methods. I believe that it is fair to say that there is something of worth in each of these methods, that all have a place in the treatment of head injuries, and that none should be discarded. The tendency of recent years has been to use subtemporal decompression very sparingly in the treatment of post-traumatic cerebral edema and to depend more upon hypertonic solutions intravenously and lumbar drainage of spinal fluid. I believe that subtemporal decompression should only be performed when these other methods have been tried and have failed. The most satisfactory hypertonic solutions are those of glucose and of sucrose. One hundred ccm. of a 50% solution of either may be given. The injection may be repeated when needed. Sucrose is said to be superior to glucose in that a secondary rise of pressure does not occur or is less marked. If lumbar drainage is employed to reduce intracranial pressure it should be controlled with manometric readings. The fluid should be removed slowly until the pressure is about one-half of what it was at the start of drainage.

Extradural and subdural hematomas are indications for immediate operation. In the case of extradural hemorrhage a craniectomy opening is made in the subtemporal region, the clot evacuated and the bleeding point controlled. This last may be accomplished by passing a silk ligature around the middle meningeal artery, coagulating the bleeding point with the electrosurgical unit, or by plugging the foramen spinosum with cotton or bone wax. A small drain should be left in the wound, which is closed preferably with silk. It may be possible to evacuate a subdural hematoma through a single perforator opening in the skull in the fronto-temporal region. Frequently it is a better procedure to make two openings, one fronto-temporal and one parietal. Following removal of the clot, a large Penrose drain is placed beneath the dura and its ends brought out through the perforator openings. The incisions are closed with silk and the drain removed after 48 hours. An intracerebral clot may be removed through a small craniectomy or after turning down an osteoplastic flap. The dura is opened and an incision made into the brain down to the clot, which is then evacuated. Subarachnoidal hemorrhage is best treated by repeated lumbar drainage of spinal fluid.

The only skull fractures requiring operation are those that are compound, depressed, or comminuted with bone fragments driven through the dura into the brain. In compound fractures, it is imperative to attempt to prevent intracranial infection by the thorough debridement of all contaminated tissue. All foreign bodies driven through the fracture into the intracranial cavity, as pieces of felt, hair, and the like, should be removed. It is desirable also to remove devitalized cerebral tissue when this is found to be present. Debridement of the wound and fracture should be made within eight hours after the injury if at all possible since the danger of infection increases rapidly after this length of time. Large depressed fractures, especially those over the motor areas of the brain, should be operated in order to prevent the possibility of a later-appearing epilepsy caused by cortical irritation. Bone fragments driven into the brain after comminution of the skull should be removed.

The best treatment of infection is its prevention. When it appears intracranially, fatality is very probable. For post-traumatic meningitis there is little to offer therapeutically save repeated drainage of spinal fluid. Cerebral abscess must be drained. If osteomyelitis of the skull develops, the area of involved bone should be rongeured away. Infection of the scalp is treated by incision and drainage.

4119 N. ILLINOIS ST.

## CONSTIPATION AND CATHARTICS\*

CLIFFORD O. RICHEY, M.D.

Evansville

Constipation is a disease entity known and recognized from the time of the ancients down through the ages and into our modern medical era. It has suffered many changes and abuses throughout all ages, having been at times properly handled by our legitimate physicians, then in the hands of quacks and vice versa. As we view it today, it is still recognized as a disease entity but, nevertheless, it is badly mishandled and neglected.

Hippocrates once wrote, "Persons in good health quickly lose their strength by taking purgative medicines or using bad food." As early as 931 A. D., in Bagdad, an applicant for medical licensure was granted a license only on condition that he would not prescribe phlebotomy or any purgative drugs except for simple ailments. Elbert Hubbard has said, "In the race of life, the man with the educated bowels will eclipse the man with an educated brain; and drugs and chemicals that work while you sleep are a little later going to prevent your working when awake." Is it not wise then that we as physicians of today take cognizance of the suggestions handed down to us by our predecessors?

The objects of presenting this paper are, first, to make an appeal for a more concerted effort on the part of the profession to counteract the evil influence of misinformation and ruthless distortion of facts, methods used in the commercial exploitation of pseudo-scientific and fraudulent remedies solely for financial gain; and second, to stress the importance of a more thorough and scientific application of knowledge in the treatment of constipation in order to relieve the miserable sufferers who have become victims of fraud, neglect or injudicious treatment. It has been stated that it is not so much that we need more knowledge but a more universal application of that which we already possess.

When a patient consults you complaining of constipation, let that be a mental signal to you to take a thorough general survey of the patient. By this is meant a sizing up of the physical type of the patient, a painstaking history and a thorough physical examination. If time does not allow you to do this at the moment, explain the importance to the patient and arrange for a time to do so. Be kind and sympathetic with these patients and by so doing you will obtain the pertinent facts from the patient that will aid you in making a more accurate diagnosis as to the underlying cause. These patients usually are nervous and apprehensive, and if they are hurried they will not be able to give you their accurate history. By all means do not hurry them off with a few brief instructions,

\* Presented before the Gibson County Medical Society, Princeton, February 10, 1936.

the usual pill or bottle of purgative and tell them to go home and forget it.

A practical definition of constipation is that condition wherein the patient does not have one passage of feces every twenty-four hours. We know, of course, that there are exceptions to this definition, in that it may be normal for some individuals to defecate once in two or three days, and on the other hand an individual may be constipated or have lack of proper fecal passage through the colon and still have one to four defecations daily.

It is generally recognized at the present time that constipation is grouped into the atonic, catarrhal and spastic forms. These three forms actually represent three consecutive stages in the course of development of chronic constipation and can readily be differentiated by few subjective symptoms and objective findings.

In the atonic stage patients do not complain of either pain or flatulence. Stools are normal in form and consistency but of large caliber.

The catarrhal stage is recognized, subjectively, by the presence of flatulence, especially after gas-producing foods, but is not associated with pain. Objectively, the characteristic feature of the stool is the presence of membranous mucus enveloping the scybala.

The spastic stage is characterized by pain and flatulence, the pain being due either to flatulent colic or to mucous colic and aggravated by purgatives, enemas or coarse foods. Objectively, the sigmoid can be palpated as a hard cord and is painful. On rectal examination, the sphincters are spastic and the rectum is usually entirely empty and contracted or it may contain small, hard fecal masses. The mucosa is highly reddened and mucus is found either free or in the rugæ. The stool is small in calibre, often knotted, and contains either free mucus which is occasionally blood streaked, or mucus mixed with dry, hard feces.

#### CAUSES OF CONSTIPATION

A knowledge concerning the various causes and clinical forms of constipation is essential to successful treatment.

The general causes may be divided into:

1. Constitutional—poor body posture and obesity and the megalosplanchnic type with redundant colon.
2. Habits—the sedentary type of individual, who eats too much and exercises too little.
3. Diet—which fails to produce sufficient residue or is so irritating that it causes colonic spasm.
4. Diseases—secondary to affections of the liver and gall bladder, stomach and intestines, anemia, functional neurosis, thyroid disease and many others.
5. Drugs—purgative medicines which act by irritating the intestinal mucosa never cure but perpetuate and complicate the disease by causing a spastic colitis.

6. Neglect to respond when the normal impulse to defecate arises is one of the most common causes. Repeated neglect tends to lessen the sensibility thus requiring a stronger stimulus, which results in atony and dilatation of the rectum, a condition for which Hurst introduced the word "dyschesia."

7. Local causes—weakness and relaxation of the abdominal muscles due to over-distension from obesity or frequent pregnancies. Tumors pressing on the intestines, foreign bodies and strictures, ptoses, adhesions and kinking of the colon, atony and dilatation of colon and spastic contraction occurring in nervous vagotonic individuals or secondary to ulcerative colitis, etc.

#### TREATMENT

Most of you now begin to think of cathartics. Let us think of cathartics as being conspicuous by their absence; however, we must in some of the more obstinate cases use some of the mild purgatives, at first very cautiously and judiciously, being ever mindful of discontinuing them once the process of defecation has been established. It is very rare that one needs to employ them.

1. *Atonic Type*—The treatment of atonic constipation, which is largely prophylactic against the more severe chronic spastic form, should be established upon a sound hygienic and dietetic basis. The patient should lead a normal life, develop regular habits in regard to exercise and meals, and should be instructed to go to the toilet regularly every morning after breakfast. He should be encouraged to take plenty of exercise in the form of gymnastics, swimming, golf, horseback riding, etc. Enteroptotic patients should wear a suitable abdominal support. The diet should be calculated to furnish an abundance of residue. Accordingly, it should be rich in cellulose, which mechanically stimulates peristalsis. If a patient is under-nourished, a high caloric diet is indicated. Drugs should only be used for temporary relief. Occasionally salines or some of the milder common remedies, such as rhubarb, senna or cascara may be used.

The following list, introduced by Dr. Frank Smithies, serves all the requirements of an ideal diet for this class of patients:

**BREAKFAST**—Eight stewed prunes, one sweet grapefruit, or five figs. Well cooked cream of wheat or oatmeal, or shredded wheat biscuits (use cream).

Soft boiled eggs or poached eggs.

Graham or rye bread with little butter.

Two cups of hot water or very weak coffee.

**AT NOON**—Creamed or strained soup, or soup from peas, beans, potatoes, celery, barley or vermicelli.

Meat very sparingly—every day may take not

more than four ounces of rare beef, lamb chops, or white meat of chicken.

Eggs soft boiled or poached.

Graham or rye bread with little butter.

Eat an excess of vegetables—spinach, asparagus, tender celery, tender string beans, cauliflower, mashed squash, mashed carrots.

Eat an excess of prunes, figs, dates, applesauce, steamed peaches or apricots.

Drink hot water or milk and hot water, or hot water flavored with coffee.

**AT NIGHT**—Similar meal to noon except soup.

In addition, may choose broiled mutton, beef, bass, white fish, custards, gelatine, blanc mange, prune whip, tapioca, sage.

**DO NOT EAT**—Strong tea, cocoa, chocolate, rice, blackberries, huckleberries, cheese, alcoholic stimulants.

**GENERAL DIRECTIONS**—Eat very slowly and chew thoroughly.

Take nothing very hot or very cold.

Forget worries at meals.

Go to stool, once daily, in the morning, and stay for ten minutes.

Never eat until you are overfilled.

Take a light lunch—for example, a glass of milk and two crackers—at 10 in the forenoon and 3:30 in the afternoon.

Eat no raw fruits or vegetables for six months (must be cooked).

**2. Catarrhal Constipation**—This is the form that has resulted when the patient has practiced self medication, enemas, etc. However, it may take many years of the above before the stage is reached. When the catarrhal stage is reached, if proper diet is not prescribed and purgative drugs withdrawn, the condition will pass over in a short period of time to the more chronic and persistent form of spastic constipation or colitis. Since the treatment of both the catarrhal and spastic forms are virtually the same, they will be considered together. This can best be done by presenting a typical case report of this condition.

Mr. M. J., white, male, age 33, came for consultation May 29, 1933. Complaint: constipation (severe), extreme nervousness, and exhaustion; piles. Past history: irrelevant. Physical examination: Fairly well nourished male of the hyposthenic type. All negative except tenderness in the left iliac fossa where sigmoid and descending colon could be mapped out in a cord-like manner and extremely tender. Entire colon could be felt and was spastic and somewhat tender. No local rigidities or skin sensitivity noted. Sigmoidoscopic examination showed very tight sphincters and highly irritated spastic rectum and sigmoid. In sigmoid fine mucus in rugæ and rectum contained

a few small scybalæ covered with mucus. Laboratory—Urine, acid; albumen, negative; sugar, negative; microscopic, normal; stool—no free fats or carbohydrates, no occult blood—food residue finely divided with mucus intermixed.

**Diagnosis**—Chronic spastic constipation; chronic colitis; colonic stasis.

**Treatment of Spastic Type**—The treatment can best be impressed upon you by giving a brief regime of the handling of the above case.

After taking a careful history (sufficient time being given the patient to allow him to tell his complete story, thereby gaining the point of his extreme phobia of losing his position, which gave much promise) a complete examination followed with the above pertinent points mentioned.

1. The diagnosis was completely explained to the patient as to cause, proper handling and the course to be expected in response to the treatment, e. g., the necessity of strict supervision until his bowel became normal. The patient was then allowed to ask questions, insuring a complete understanding on his part. This part of the handling of these cases cannot be overstressed.

2. Next the patient was told when and how to rest. Not only eight to ten hours of sleep was required, but two rest periods during the day of one-half hour each, coming after lunch and after the evening meal.

3. The Smithies diet was started minus the roughage or with the roughage pureed.

4. A tepid sponge or shower every morning was insisted upon, thereby serving two purposes; namely, circulatory stimulation and the bending and twisting exercise as a result of the drying of the skin.

5. Next comes an important phase, e. g., to correct the colon spasm. Here psychotherapy plays a most important part. In our case the reassuring of the patient that he could be cured and would be able to hold his position and obtain the promotion that awaited him. Hot compresses over the abdomen are helpful. No enemas or purgatives. Use mineral oil, agar, psylla seeds or combinations of them. Use antispasmodics, the preference being a combination of tincture of belladonna and strontium bromide. Heavy calcined magnesia is the drug of choice, to be combined with the antispasmodics and any of the kaolin containing products to stimulate the colon to produce bowel movement, in order not to irritate as do the usual cathartics. Calcium therapy is a valuable adjunct as is also the use of extract of parathyroid in the early stages.

6. In the patient with the obese, pendulant abdomen, a proper abdominal support is an aid.

7. In extremely nervous patients the mechanical dilatation of the anal sphincters is most important.

Colonic irrigation is harmful and should never be used.

This patient cooperated whole-heartedly and his response was most satisfactory. He was under strict supervision for one year, then on modified treatment for six months. Since that time, by proper diet and rest, he has had regular daily bowel movement without any form of medication. He has regained his normal weight, is not nervous, and is now holding a responsible position as sales manager of the company with which he started as a salesman.

In conclusion, allow me to quote Dr. J. D. Gray,<sup>1</sup> of Augusta, Georgia. "The great majority of these cases can be relieved and cured and the profession has a responsibility in this matter, which they cannot disregard. It is not enough to class the individual as a neurotic and lose interest in his welfare. He may find an irregular practitioner who is not too busy to listen to him, and by re-educating him along rational lines of living, may relieve his symptoms and restore him to a useful life."

517 CENTRAL UNION BANK BLDG.

## REVERSE SPONDYLOLISTHESIS

### CASE REPORT

E. T. STAHL, M.D.

Lafayette

The patient, R. D., male, white, age 34, weight 165 pounds, height 6 feet, came for consultation on June 7th, 1933, stating that three days previously, while employed as a foreman on a roofing job, he had stooped over and reached out with the right arm and picked up a bucket of asphalt, weighing 25-30 pounds. As he lifted this, he felt a sharp pain in the lower part of his back and had difficulty in straightening up. His back remained painful and he could not support the trunk of his body vertically without listing to the left considerably. He had no symptoms of neurologic changes in the extremities and had continued supervising his work.

Past history was negative for back injuries or complaints. He had no serious illness in his past life, but had been afflicted with chronic constipation and mild dyspeptic symptoms for several years. He had been employed in work similar to his present occupation for several years.

Examination revealed a man of slender build, apparently in good health generally. No physical defects were noted other than his back. As he stood or sat upright, the trunk of his body listed markedly to the left and rotated somewhat to the left, angulation apparently taking place in the lower lumbar spine. On lying down, either prone or on his back, the spine assumed straight alignment. Lumbar lordosis was practically absent.

The spines of the fourth and fifth lumbar vertebrae were prominent as compared to the sacrum. Muscular rigidity was present on both sides in the lumbar region with tenderness on pressure over the lumbosacral area. Flexing of the trunk and extending from flexed position caused pain in the lumbosacral area. Full flexion of either thigh with the knee extended caused pain in the same area. The reflexes of the lower extremities were normal.

X-ray examination on June 7th, 1933 (anteroposterior and lateral plates of the lumbar spine and sacrum) gave definite diagnostic help. Margins of the sacrum and the fifth lumbar were traced. (See Figure 1.) A lateral view showed dorsal displacement of the lumbar spine on the sacrum, amounting to at least one-fourth the width of the fifth lumbar body. Antero-posterior view showed some overlapping of shadows of the fifth lumbar and upper sacral segment, although this probably was due to the angle at which the plate was taken.

The patient was sent to the hospital and given a hypodermic consisting of  $\frac{1}{3}$  grain morphine. He was then placed on an Albee frame face downward, traction was applied to both legs, and countertraction under the arms. A strap was passed under the upper part of the thighs and drawn tight across the frame under the hammock to support the pelvis toward the dorsum of the body. Considerable manual pressure was then made over the lumbar spine, attempting to encourage its slipping forward on the sacrum. A plaster of Paris jacket was then applied from the symphysis pubis to upper border of sternum anteriorly and from the lower part of sacrum to the upper dorsal spine posteriorly. The patient was allowed out of bed as soon as the cast was firm and he left the hos-



Fig. 1

<sup>1</sup> Gray, J. D., Augusta, Georgia: Irritable Colon. *J. A. M. A.*, 23:259-264, July, 1934.

pital in three days, walking and with no discomfort in his back.

A lateral x-ray was made on July 3rd, 1933, through the cast, which showed practically normal relation between the fifth lumbar and the sacrum. The cast was worn for three months and the patient filled his position as foreman the last five or six weeks of the time. X-ray examination was made again when the cast was removed (Figure 2), which showed the same relation as the previous x-ray, although it appeared that possibly some bone production had taken place at the posterior margin of the lumbo-sacral articulation. This is one finding which leads me to feel that a fracture was present, probably involving an articular facet. He was able to flex his spine and then extend it with very little discomfort. No muscle spasm was present. Lumbar lordosis was still very slight. No angulation, or listing to either side was present. He had continued at his work since then, wearing only an ordinary sacro-iliac supporting belt with a firm pad posteriorly.

On July 30th, 1934, almost fourteen months after the onset of symptoms, I saw him again. He was still symptom-free, had discarded the belt, and was working steadily, not at hard manual labor, but his work required considerable climbing and exercise. He had refrained from heavy lifting. An x-ray examination was made again on this date with findings the same as at the time the cast was removed. Up to September, 1936, he has had no recurrence of symptoms.

I do not know whether or not this man's relief will be permanent, but I believe that if excessive strain were thrown on this region the displacement would recur. In such a case, I would advise sur-

gery to accomplish a fusion between the lower lumbar segments and the sacrum.

#### COMMENTS

This case is reported because it is a condition seldom seen, even in large orthopedic clinics.

References to spondylolisthesis in the literature are fairly numerous, but reference to the displacement of the lumbar spine posterior to the sacrum is rarely found. H. W. Myerding in the *Journal of Radiology* for February, 1933, states that: "The average incidence of spondylolisthesis given in literature varies from 0.0054% to 0.92% of the patients examined. Average at the Mayo Clinic in examination of 500,000 consecutive patients was 0.23%. Of this small group of patients 2%, or 0.0046% of the half-million patients examined, had displacement of lumbar spine posterior to the sacrum."

Brailsford and Lovett's text, "Orthopedic Surgery," mentions that up to 1905 all recorded cases, except one, were of anterior displacement of lumbar spine on sacrum. In this one case the sacrum was anterior to the lumbar spine.

Albee's "Orthopedic Surgery" does not mention this type of displacement of lumbar spine.

J. F. Brailsford<sup>1</sup> mentions the examination of 3,000 patients with back conditions which revealed five cases of spondylolisthesis, all of the usual type. Of these, three were in girls, ages thirteen, fifteen and seventeen years respectively; one in a boy, age 17; and one a man, age 35. He lists the cases of deformities of lumbo-sacral joint as follows: (1) Congenital deformities; (2) Injury; (3) Pathological processes; (4) Habitual faulty posture. He mentions two types of spondylolisthesis: (1) Unilateral—only one set of articular facets separated by slippage, necessarily with rotation of lumbar spine, and with early paralysis due to pressure on and displacement of cauda equina; (2) Bilateral separation of facets due to gradual slippage or changed relation of adjacent spinal segments and accompanied by mild symptoms—the common type. He also states that deformity of the lumbo-sacral region, due to fracture, is not common, and when it does occur it is due to very severe trauma. He does not mention displacement as in the patient described in this paper.

W. E. Dodd<sup>2</sup> mentions spondylolisthesis and stresses anterior sloping plane of lumbo-sacral joint as a predisposing factor, but does not mention posterior displacement of lumbar spine.

W. C. Campbell,<sup>3</sup> in a paper on "Diagnosis and Treatment of Affections of the Lumbo-Sacral Region," does not mention this type of displacement. 308 NORTH EIGHTH ST.

<sup>1</sup> Brailsford, J. F.: Deformities of the Lumbo-Sacral Region. *Brit. Jour. Surg.*, Apr., 1929. 16:562-627.

<sup>2</sup> Dodd, W. E. Some Causes of Backache. *W. Virginia Med. Jnl.*, Dec., 1929.

<sup>3</sup> Campbell, W. C.: Diagnosis and Treatment of Affections of Lumbo-Sacral Region. *Texas State M. J.*, May, 1932.



Fig. 2

## CLOSER COOPERATION AMONG PHYSICIANS\*

E. H. BRUBAKER, M.D.  
Flora, Indiana

Three things I want to stress are: Need for cooperation, snares to be avoided, and benefits to be derived.

### NEED FOR COOPERATION

We can scarcely go into any community where there are physicians that we do not find some jealousy, hatred, and selfishness existing among them. One's selfishness will forever bar his promotion. Generosity of service, tolerance and good will toward others, and absence of jealousy or envy of competitors are qualities which everyone admires, and they often have quite as much to do with advancement as ability.

In all social problems of our complex age, co-operation is a word to conjure with. We are so interdependent that cooperation is imperative; aloofness means failure. Success depends upon vital contacts, personal relations, effective alliances—in short, team-work. No man ever achieves success alone. Long ago I realized that I can not please everybody and for that reason some see fit to choose another physician. Why should I be so egotistical that I would refuse to cooperate with my competitor? No man lives unto himself, for we touch other lives every day. We should be interested in our colleague to such an extent that we will help to protect his life, his health, his reputation, his property, and his happiness. The reason that we need cooperation is that there is too much unjust criticism. Our patients would fare better and it would be more profitable to us if we would show a better spirit within the profession. We could render better service because no one man knows everything. It has been said that about two-thirds of the malpractice suits brought against physicians have been instigated by some other physician. A slighting remark about another physician's line of treatment rekindles a smouldering fire that already exists in the patient. Sometimes this is done in an unguarded moment and without realizing the harmful effects that it might bring forth; at other times, I am sorry to say, it has been done deliberately because of the malice and hatred of one physician for another.

If we, as members of the profession, will stick together and work in harmony, our unity will have a decided bearing on banishing the impending evil of socialized medicine.

### SNARES TO BE AVOIDED

Be fair with your competitors. Learn to cultivate fair-mindedness and a spirit of tolerance and generosity toward him.

There is no reason why a man should try to undermine his competitor by belittling his good qualities and magnifying his faults. Do not let rivalry degenerate into treacherous warfare and petty selfishness.

Learn to show a spirit of generosity and large-heartedness toward your rivals, and treat everybody with fairness. You will find that this policy will pay in the end, and you will be a better man.

Do not spend your time "crying down" your competitors, but build up yourself. Let the superiority of your methods of business advance you. The world always looks with contempt upon a man who attempts to build himself up by pulling others down, or to climb upward on the misfortunes of others. The world admires justice and fair-dealing, and any attempt to take advantage of another inevitably will react upon yourself.

The consciousness of a feeling of good will and love toward others is the most powerful and most healthful tonic in the world. It is a wonderful stimulant, for it enlarges, sustains, and ennobles life. It kills selfishness and scatters envy and jealousy. A habit of thinking generously and kindly of everyone has a marvelous power in transforming one's life. It harmonizes all faculties. Nothing small or mean, stingy or despicable, can exist in a mind holding such thoughts.

Never criticize your predecessor. Never say that his treatment was wrong. If you feel that it must be changed, say that the patient's condition has altered and that if Dr. Blank still had the case, he, too, would change the regimen. Do not forget that if you make sarcastic remarks about another physician, he will be sure to hear about it. We should think seriously before expressing our opinion of another physician or his treatment.

Several years ago I was called on a case that had been under the care of another physician, but I was not aware of it until I got into the house. Members of the family at once proceeded to tell me all about it. They felt that the doctor had neglected the patient and consequently they had consulted a lawyer and were intending to bring suit for malpractice. I at once defended the attending physician, and informed the family that they would get nothing even if they did bring suit, for that doctor and every doctor in our town carried protective insurance for that purpose, and that they would be fighting expert lawyers whose experience assured their success in defense. Suffice it to say that no suit was brought. A physician does not know just how soon he will be defending a suit of his own.

Another snare to be avoided is this: The attending physician on a case happened to be out of town and another physician was called. He examined the patient and asked to see the medicine that the doctor had left. After smelling and tasting the same, he said, "Good Heavens! No wonder you are not getting well!" and, opening the door, he threw out the bottle. He then prescribed his

\* Presented before the Clinton County Medical Society  
March 4, 1936.

own medicine and said that if the patient did not improve to let him know. Instead the people called their family doctor and told him what the other doctor had said. He only replied, "You tell him for me that I want to thank him for the compliment that he passes upon my line of treatment." Can you guess what the emergency doctor gained by making such an unjust, ungentlemanly and unethical statement?

In another instance, a physician sent a case to a clinic and asked for a report of their findings. Some time elapsed, the doctor had not seen his patient, and he wondered what was wrong. One day he saw the patient and asked him why he had not been back to the office. The patient's reply was, "They gave me some medicine and told me to come back to them in a few days where there were real doctors instead of going to a tin-horn doctor." Does that kind of talk in referring to a physician have a tendency to create peace and harmony in the medical profession?

If we as physicians would use more constructive criticism instead of so much destructive criticism, there would be fewer heartaches in our profession.

#### BENEFITS TO BE ACHIEVED BY COOPERATION

Cooperation demands unselfishness and generosity of services. Unselfishness and tolerance have as much to do with advancement and success as ability. Individual improvement and improvement of the profession, together with increased service to humanity, can be made possible if we have cooperation of the medical profession.

To be truly respected by our fellow men and our patients, we must respect each other. In union there is strength.

Many physicians take special courses each year and become experts in their line of work. Through cooperation we can be mutually helpful to each other by giving or sharing the help received from the specialists.

Egotism and aloofness may blind an otherwise learned and useful person. There is some good in everyone, and esteem begets esteem in others. We listen more attentively and learn more from those whom we respect. Harsh criticism and mistrust of our fellow physicians are much tempered and often fade away when we really get acquainted with them and cultivate their fellowship.

Getting together at medical meetings and occasionally converting those meetings into purely social affairs where we can really get acquainted with each other would be one way of having closer cooperation among the physicians.

Jealousy is an evil trait of character that has caused untold wrong and harm in our profession. We can not get entirely away from it, but we should make a concerted effort to limit its baneful effects.

The following poem written by Edgar Guest expresses my sentiments:

I'd like to leave but daffodils to mark my little way,  
To leave but tulips red and white behind me as I  
stray;  
I'd like to pass away from earth and feel I'd left  
behind  
But roses and forget-me-nots for all who come to  
find.

I'd like to sow the barren spots with all the flowers  
of earth,  
To leave a part where those who come should find  
but gentle mirth;  
And when at last I'm called upon to join the heav-  
enly throng  
I'd like to feel along my way I'd left no sign of  
wrong.

And yet the cares are many and the hours of toil  
are few;  
There is not time enough on earth for all I'd like  
to do;  
But, having lived and having toiled, I'd like the  
world to find  
Some little touch of beauty that my soul had left  
behind.

#### ABSTRACT

##### PRESENT STATUS OF FEVER THERAPY PRODUCED BY PHYSICAL MEANS

FRANK H. KRUSEN, Rochester, Minn. (*Journal A. M. A.*, Oct. 10, 1936), states that during the past year the use of fever produced by physical means has been recommended for no less than fifty different diseases. The results in the treatment of the majority of these diseases have not been encouraging, although for a selected few the method of treatment has given promise of great usefulness. The studies which have been made during the last year indicate that the chief sphere of usefulness of this form of therapy lies in the treatment of gonorrhea, both acute and chronic, and its complications. It would appear that it may be of value in the treatment of syphilis in its various manifestations, particularly when fever therapy is combined with chemotherapy. While there is a suggestion that artificial fever produced by physical means may be helpful in the treatment of intractable bronchial asthma in selected cases of chronic infectious arthritis, chorea and undulant fever, nevertheless clinical data are not sufficient to permit any final conclusions. Its value in about forty other diseases remains to be proved. It seems to offer promise of considerable usefulness as a therapeutic agent particularly in the treatment of gonorrhea. Hemorrhagic encephalitis has occurred in some instances, and hemorrhagic pneumonia also has been noted. Deterioration and hemorrhage may occur in the cortex of the adrenal glands. Death may occur as the result of vascular collapse. In subacute bacterial endocarditis there is apparently danger that fever therapy may produce multiple emboli. Studies during the past year have emphasized the facts previously stressed by the Council on Physical Therapy, namely, that production of fever by physical means is strictly a hospital procedure; that it is essential that a well-trained personnel be in complete charge of the work. Patients to be treated with fever should be selected with as much care as are patients who are to undergo a major surgical operation. It would seem quite apparent that, for the present, the medical profession as a whole should avoid the use of fever therapy unless there is available an institution properly equipped to administer this type of treatment.

# THE JOURNAL

OF THE

## INDIANA STATE MEDICAL ASSOCIATION DEVOTED TO THE INTERESTS OF THE MEDICAL PROFESSION OF INDIANA

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NOVEMBER, 1936

## EDITORIALS

### THE SOUTH BEND SESSION

Registration: 1,150!

With the greatest registration that ever has been recorded for an annual session of the Indiana State Medical Association held outside of Indianapolis, South Bend provided one of the most satisfying, pleasant, and worthwhile conventions that has been noted in the annals of the Association. It was superbly conducted, and the perfection of the arrangements was due wholly to the interest, zeal, and friendly cooperation of the St. Joseph County physicians and the South Bend and Mishawaka companies which aided in sponsoring this year's convention. Everything from hotel reservations to slight details for private parties was carried out with a smoothness that evidenced capable local management. Individuals and committees alike deserve the unreserved praise of the 743 physician members, 284 women, 56 men guests, and 67 exhibitors who registered. In 1920 South Bend entertained the Indiana State Medical Association when the registration totaled 421!

An almost unprecedented program of splendid events followed each other with frictionless rapidity throughout the three days of the session.

The Indiana health officers held their forty-second annual conference at the Jefferson Plaza, the convention headquarters building, on Monday, October fifth, just preceding the convention of the Indiana State Medical Association. The principal speaker for this meeting was Dr. Reginald M. Atwater, executive secretary for the American Public Health Association in New York City.

The usual features of the first day, golf and the trap shoot, were enjoyed by a great number

in spite of occasional showers. Commercial exhibitors contributed a sufficient number of prizes so that each of the 85 participants had one. With a score of 82, Dr. B. A. Burkhardt, of Tipton, Dr. H. L. Cooper, of South Bend, and Dr. K. T. Knodel, of South Bend, tied for the first low gross score. Dr. Clyde Fish, of South Bend, was second with 84; Dr. R. W. Wood, of Oakland City, was third with an 85, and Dr. Cleon Nafe, of Indianapolis, had an 86 for fourth place. The contest for long driving was won by Dr. K. K. Kraning, of Kewanna, and Dr. G. G. Eckhart, of Marion, won first place for approach shots. The 1935 champion in the Indiana State Medical Association golf tournament was Dr. Robert R. Acre, of Evansville.

Dr. C. W. Cullnane, of Evansville, did a remarkable bit of marksmanship in the skeet shooting event, making 49 out of a possible 50. Dr. Byron Nixon, of Indianapolis, was second with 43 out of 50; and in the trap shooting contest, Dr. A. S. Newell, of Converse, and Dr. Byron Nixon, of Indianapolis, tied for first place with 48 out of 50.

The annual smoker was held in the Jefferson Plaza, with entertainment in the way of prize fights, a comedy wrestling match, and most interesting of all, sabre and foils combats by the Notre Dame fencing team. Of course, there were various intermissions for refreshments. Attendants reported an hilariously enjoyable evening.

On Wednesday morning, October 7, the formal scientific program was opened, and the general meeting room was filled to capacity to hear the address of the president, Dr. R. L. Sensenich, and the scientific presentations of Dr. B. R. Kirklin, Dr. L. F. Sise, Dr. R. L. Cecil, and Dr. F. A. Collier. The various sections held meetings in the afternoon, and record attendances were reported.

The beautiful and impressive dining hall of Notre Dame University provided banquet accommodations for the more than 700 members and guests who sat down to a dinner such as would delight an epicure. Efficiently and speedily served by the seemingly countless number of student waiters (we think we counted 50), the dinner was thoroughly enjoyable, and comments of pleased surprise and commendation were heard on every side concerning the excellence of the food and service. Dr. R. L. Sensenich introduced the guest speakers of the evening, Dr. J. H. J. Upham, president-elect of the American Medical Association, and Dr. Gordon Laing, of the University of Chicago, each of whom supplied sufficient merriment to guarantee good digestion—but we still don't know whether doctors are human or not, even after listening attentively until 11:00 p.m.! The Studebaker male chorus provided a musical interlude that was inspiring and thoroughly enjoyable.

Guest speakers on Thursday morning were F. L. Adair, of Chicago; L. W. Dean, of St. Louis; F. E. Senear, of Chicago; E. L. Sevringhaus, of Madison, Wisconsin, and John A. Toomey, of Cleveland,

Ohio. Scientific interest was attested by the fact that the general meeting room remained full until the last speaker had completed his paper.

The House of Delegates held its usual two meetings, as did the Council, and a great amount of business was transacted. Complete reports of these meetings are published under "Societies and Institutions" in this JOURNAL.

Dr. Herman M. Baker, of Evansville, was elected president for 1938, defeating Dr. Walter MacFadden, of Shelbyville, and Dr. O. T. Scamahorn, of Pittsboro. Dr. A. F. Weyerbacher, of Indianapolis, was re-elected treasurer. Delegates and alternates to represent the Indiana State Medical Association at Atlantic City in 1937, and whose terms expire December 31, 1936, were re-elected as follows: Dr. H. G. Hamer, Indianapolis; Dr. R. L. Senenich, South Bend; alternates, Dr. W. F. Kelly, Indianapolis, and Dr. E. M. Shanklin, Hammond.

The present editor of THE JOURNAL, Dr. E. M. Shanklin, of Hammond, was re-elected for 1937, and Dr. Thurman B. Rice, of Indianapolis, was re-elected by the Council to serve on the Editorial Board for a period of five years.

Section officers for 1937 were elected as follows:

Section on Surgery: Chairman, George Green, South Bend; vice-chairman, Paul Beard, Indianapolis; secretary, Frank B. Ramsey, Indianapolis.

Section on Medicine: Chairman, E. M. VanBuskirk, Fort Wayne; vice-chairman, George Dillinger, French Lick; secretary, B. G. Keeney, Shelbyville.

Section on Ophthalmology and Otolaryngology: Chairman, Fred McKay Ruby, Union City; vice-chairman, B. N. Lingeman, Crawfordsville; secretary, E. L. Bulson, Fort Wayne.

Section on Anesthesia: Chairman, Richard E. Stout, Elkhart; vice-chairman, Fred Thomas, Indianapolis; secretary, Lillian Mueller, Indianapolis.

Officers for the Woman's Auxiliary were elected as follows: President-elect, Mrs. Fred Wishard, Pendleton; first vice-president, Mrs. Maurice VanCleave, Terre Haute; second vice-president, Mrs. H. S. Leonard, Indianapolis; third vice-president, Mrs. James W. Baxter, New Albany; fourth vice-president, Mrs. R. M. McDonald, Mishawaka; recording secretary, Mrs. Alfred Ellison, South Bend; treasurer, Mrs. C. L. Bock, Muncie; and corresponding secretary, Mrs. Herman Baker, Evansville. Mrs. Marcus Ravdin, of Evansville, is the president for 1937.

The 1937 annual session of the Indiana State Medical Association will be held in French Lick. Definite dates will be decided upon later.

Commercial and scientific exhibits were unusually excellent at this session, and both physicians and guests apparently enjoyed and profited by their visits to the various booths. Further comment concerning the exhibits appears in the article on "Convention Notes" elsewhere in this issue.

This editorial would be incomplete without an expression of thanks to those South Bend physicians and South Bend companies whose interest made possible the success of this convention. It was one that will long be remembered with pleasure by the 1,150 attendants. And remember that 1,150 registrants for a session outside of Indianapolis provides an all-time high—a mark to shoot at indeed!

## "BASKETBALL INSANITY"

Dr. Thurman B. Rice, in a recent radio address, took occasion to discuss "basketball insanity," a disease that may be said to be indigenous to Indiana since few other states yield to such a high degree to this disease. Just why Indiana should annually go into maniacal frenzy over this sport is unknown to us, but it does seem that along with the close of the high school football season, devotees of high school athletics begin to lose their sense of normalcy and a few months later, when Butler Field House takes the front of the stage, "basketball insanity" reaches its peak.

Well known for his advocacy of all sorts of sports for the growing youngster, Dr. Rice stresses the important point that it is quite possible to over-do any branch of athletics, and in this contention he has the support of our State Association, and for several years we have had a special committee to discuss and study this very problem, with the question of basketball as it is played in our high schools one of the major considerations of the committee.

"Basketball in Indiana is best described as being a form of acute insanity which reaches its peak at the time of the state tourney," Dr. Rice says. He maintains, and we believe correctly so, that health and physical education have too often been slighted in our schools. "Very frequently health education is turned over to anyone on the school faculty who has a vacant period during the day. Physical education too often consists merely in calling a bunch of likely boys together, tossing them a basketball, and letting them get such practice as may make better material for the basketball team." Dr. Rice speaks with authority when he discusses this subject, for he is generally conceded to be an authority on health matters, and makes his pronouncements only after a thorough study of the problem at hand.

We are in accord with Dr. Rice's observations. Basketball, we believe, is quite overdone in our state. We never have attended the finals in the tournament, but we have visited the regionals and have come away convinced that the youths engaged in these battles undergo a physical and mental strain that would seem too great for their years. The emotional strain which should have little place

in growing youth must not be disregarded. We have seen those lads at the end of a losing game with tears streaming down their faces; we have seen them playing with what amounted to an emotional frenzy in an endeavor to accomplish the impossible. Such a strain, following a campaign of several months, is quite too much for youth.

Our committees seem to have arrived at no definite end in their studies of the basketball problem, since the change made in the management of the final tournament helps the situation but little, yet we believe it would be well for the medical profession to continue this or a similar committee. It should also be remembered that many of these basketballers come almost directly from the football field; many of them leave the basketball courts to take up their track training which makes almost an entire school year of scholastic sports with intense training—too much for the boy in his teens.

True it is that all of us like our schools to be in the van in the field of sports; we attend the various games, all the while pulling with all our might for victory, but we are apt to lose sight of the fact that the contestants too often are being exhausted by their efforts. It is after the season is closed that we sit down and reflect on what it means to the lads who have entertained us during the past school year, and then we arrive at the conclusion that moderation in athletics is quite as important as moderation in other things.

Dr. Rice's opinions on this subject were cleverly presented to residents of the Hoosier state via the radio; we hope to hear more from him on the same subject.

## BASAL ANESTHESIA

More and more frequently, during the very recent years, is the above a topic of discussion whenever surgical problems are discussed by both surgeons and anesthetists. Exhaustive theses pro and con are occurring and reoccurring in the literature, while manufacturing chemists vie one with the other in the extravagance of their claims for attention. Yes, we must have progress, but progress by evolution rather than revolution. It is, therefore, of timely interest to make a few pertinent comments.

As a matter of actual, practical fact and, also, as an item of worthy conservatism for the welfare of the surgical patient, basal anesthesia is and always should be interpreted to mean the foundation anesthesia upon which shall be added the principle or carrying anesthesia for the surgical case at hand. Basal anesthesia is just that, no more—a base, a foundation. It should not be confused with complete surgical anesthesia, unsupported. In the main, basal anesthesia is a worthwhile problem in widening the application of the

practice of administering preliminary narcotics. However, to unduly extend this field, wittingly or unwittingly, is to invite results which easily might prove disappointing if not disastrous.

Preliminary morphine and atropine, or some similar combination, has become accepted by most surgeons and anesthetists as being of inestimable value to the patient. There is less apprehension, the perception threshold is lowered, salivary and mucous secretions are inhibited, induction is more comfortable, maintenance is made easier with a diminished saturation by the anesthetic drug, and, finally, recovery is smoother. In this all are agreed. Thus it may be stated as a truism beyond controversy that every surgical case should be given a properly selected preanesthetic drug—this with but a few exceptions, among which the most usual are the very extremes of age and those patients having dangerously low urinary outputs.

However, it is distressing to note that even this simple procedure is mishandled in some clinics and surgical centers. The errors vary all the way from little or nothing at all on up to overwhelmingly too much. Pure reasonableness alone must dictate that dosage must be varied not only as to the age of the patient but also as to the robustness or physical vigor or degree of prostration, and, also, as to the individual effect desired.

When one steps, therefore, into the more extended field of basal anesthesia, it readily may be perceived how almost limitless are the possibilities not only for good but also for evil. Close study and conservatism should be the rule.

The drugs used in basal anesthesia fall into three general groups: First, the barbiturates, of which amytal and nembutal may be mentioned as the type; these usually are given by mouth, though they may be administered by rectum. Second, avertin to be instilled rectally. And, third, evipal intravenously, though it also may be given by rectum.

With but little exception and with but few limitations of claim, when these drugs first were introduced they were hailed by many as complete anesthetics, and over-extravagant claims were put forth from some centers as to their therapeutic efficacy. This was unfortunate and undoubtedly led to misuse in some instances. It cannot be stated too emphatically, and the statement should stand beyond the least question, that these drugs and agents should be used as basal anesthetics only and not to complete surgical anesthesia. Primarily they are hypnotics. They are amnestic and analgesic in their effects. Only when pushed to the extreme limits of their narcotic safety does complete surgical anesthesia result. This is unwaranted, judging from the experience of many anesthetists covering a wide distribution as to locale and in a large variety of surgical conditions.

For example, we know that anesthesia can be produced by the sleep producing drug morphine (opium) and even with alcohol; yet we do not employ these agents as anesthetics per se, because to do so would entail pushing their effect to a dangerous degree of obliterative narcosis. A somewhat parallel field of potential exists when using the barbiturates, avertin, and evipal as basal agents.

The sleep, the sedation, and the adjunctive or synergistic effect of these basal anesthetics, as a preliminary to the anesthesia to be thereupon superimposed, is agreeable to the patient from the psychic viewpoint. The drugs are reasonable and efficient aids to the anesthetist, and they are acceptable to the surgeon. Properly employed, they produce no post-operative sequels of unwarranted results.

However, as in the inauguration of anything still but incompletely acceptable, caution must be used, conservatism must be employed, results must be observed and recorded, and sufficient time must elapse for the reorientation and the reconsolidation of ideas.

Enthusiasm is laudable, and without it, indeed, we would retrogress; yet enthusiasm always should be tempered with experience and with judgment.

From this there can be no escape.

## THE MEDICAL PROFESSION AND THE SCHOOLS

Without the cooperation of an intelligent and reasonably well-informed laity the medical profession would be utterly helpless. Before the surgeon can remove an appendix or a pair of tonsils it is necessary that he convince a layman, or a whole family of laymen, that such an operation is necessary, and that it is worth the fee that will be charged. When, however, the layman has a reasonably good understanding of what is going to be done to him he will usually consent. It is by means of the schools and other educative procedures—both lay and professional—that we may hope to develop the background upon which scientific medicine may operate for the good of the public and the satisfaction of itself. It is for this reason that the medical profession should establish and maintain the closest and most friendly relations with the great teaching profession. The things which are taught in the schools today inevitably will be the hope or the despair of tomorrow. If the school holds up the medical profession and tells the children of the glory of Pasteur, Lister, Osler and the other heroes and martyrs of medicine, we may be sure that there will be bred in the minds of the children a wholesome attitude toward our profession. If, on the other hand, the school should somehow get the idea that we are selfishly engrossed in our own affairs, it will be easy indeed for that idea to get

into the minds of the young people. If the schools should decide to take up the project of teaching the supposed advantages of socialized medicine, for example, it would be pretty hard for us to combat them because the schools are the official representatives of the state while we, even as a strong organization of physicians, are strictly extra-legal, and much less well situated to present our views.

Recently, for the very first time in Indiana, the schools have shown a willingness to accept medical leadership in the teaching of health, hygiene, and physical education. The services of an experienced physician in the employ of the State Board of Health have been offered to the State Board of Education. These services were gladly and unanimously accepted by that board. By this arrangement the supervision of this important field of education will become medical, as it should be. What an opportunity there is here for the teaching of the right ideals having to do with medical ethics and policies! Quackery and bunk will be weeded out as rapidly as possible. It is really too much to expect any person not trained in medicine and hygiene to be able to know just what is right about these technical matters. The State Board of Education evidently recognizes this fact and has for that reason made this forward step. It is a most welcome sign, and is a young policy which must be watered and fed by the medical profession. This little contact is capable of becoming a tremendous force for good in the years to come.

This editorial is for the purpose of expressing to the sister profession its appreciation for the fine support which it has given scientific medicine in times past. We really believe that the enlightened condition of the public in matters pertaining to health and disease is very largely due to the teaching which the children have received in the schools. We appreciate the opportunity which the new contact with the schools affords us. We solicit still further the goodwill and the friendship of the schools of the future.

We honor and respect the great body of teachers (25,000 in the State of Indiana alone) to whom has been entrusted the training of the youth of the state. That every one of this army of men and women is exemplary and wise is quite too much to expect. In the main, however, and as a group, we believe they are moral, educated, patriotic, and loyal to the American ideal. Indiana has much cause to be proud of her schools and the way they have been managed.

Doubtless the school people have many educational problems to be straightened out, just as we have many medical puzzles to be solved. We believe, however, that as a profession we can do no less than permit the sister profession to work out its own professional problems, just as we insist that we shall be granted the same privilege.

## ANNUAL REGISTRATION

An incident occurred during the second session of the House of Delegates at the South Bend meeting of the Indiana State Medical Association which seemed to indicate, at least for the present, that the members of the medical profession of the Hoosier State are distinctly against any form of annual registration. Editorial comment on this subject in favor of such a project has been made heretofore, and each time several members have advised us that such "copy" was not to their liking. The action of the House when a resolution of this sort came up for final action would seem to indicate that this sentiment is rather popular.

Having served for almost a decade on the Indiana Board of Medical Registration and Examination, during which time this matter was frequently discussed by the Board, we made a considerable study of the subject and concluded that such a step would be in the right direction. We consulted with Board officials of various states which had some such plan in operation, all of whom were enthusiastic about the plan. Occasionally the subject was more than informally discussed at some of the meetings of the Federation of State Boards and there, too, the sentiment was decidedly in favor of an annual registration of all those engaged in the practice of the healing art. During the past year, however, we have heard many arguments pro and con, and we will have to admit that the "cons" had the better of it.

Let us consider some of the advantages as well as the disadvantages of annual registration. As we view it, an annual registration would provide the Medical Board with a fairly accurate "who's who" in Indiana medicine; it would forever put a check upon those who, by one device or another, are continuing practice under the name and license of one who has died or who has permanently left the state. During our service on the Board, numerous such instances came to light, in some cases the imposter had carried on for several years before he was detected. Many of these cases have been cited in the editorial columns of THE JOURNAL.

A second favorable argument is that such registration fees would provide the Board with sorely-needed working capital, an argument with much merit behind it. Our Medical Board should have a full-time investigator, and could use two to very good advantage. Years ago, as we have before related, the Board hoarded its monies until there was a surplus of some ten thousand dollars which they expected to use in the employment of a first-class sleuth. But along came the law, creating a budget system, and the general fund of this "sovereign state" appropriated to its own use our ten thousand smackers! Occasionally we borrowed a little money from the Governor's contingent fund to tide us over until next examination period, but other than that, we never saw hide nor hair of our

hoarded monies. Many other arguments are advanced, but the two cited seem to be the most popular.

Now the negatives have a lot to say on the subject, their chief aria being the fact that this is another tax! This was vociferously voiced at the South Bend meeting of the House of Delegates. Yes, it is true that we are taxed. Rare is the month when we do not have to dig down into our tobacco sack and dole out tax monies: property tax, which means city, state and county; the little stamps that *supposedly* are fixed to our engraved paper—known as the intangible tax; narcotic tax—only a dollar for most of us, but as big a nuisance as though it were a ten spot; tobacco, amusement, and gasoline taxes; the federal income tax, and the Indiana Gross Income Tax. Oh, yes, there are other taxes, but those enumerated are enough to arouse the average reader.

Then the opponents have another argument, and one that has much merit, to the effect that a "tax" for annual registration would be for the general purpose of protecting Mr. John Average Citizen from incompetent and unregistered practitioners; if this is true, why does not the cost come from the general fund of the state? Again, it is asked, why should the medical profession create a fund that would accrue to the advantage of the culists?

There is much of merit in these contentions. Too long has the medical profession been expected to render gratuitous services here and there and on any and all occasions. A lay group starts a baby clinic, and immediately casts about for a doctor or doctors whose services are to be as free as the air. Another group wants a wholesale system of immunization, and again the medical profession is contacted. Now, so the opponents say, they want to rid the State of Indiana of illegal practitioners of all sorts, and they want the medical profession to pay the bill!

Arguments might be continued at great length for and against the proposition. We cannot cover the whole field in one editorial—a full issue of THE JOURNAL would not suffice for that. We want only to present some of the salient points to the end that when we again approach the question (like Banquo's ghost, it will refuse to be downed), we will have given it due consideration and be better enabled to discuss the question dispassionately.

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### Editor's Note

The regular department devoted to Editorial Notes is given to Convention Notes in this issue. The usual notes will appear in the December issue.

## CONVENTION NOTES

### FRENCH LICK — 1937!

WE missed a lot of the old timers, men who have been attending for years. Wonder if the distance to South Bend was responsible?

ROSS SENSENICH was the proudest man in all St. Joe County during the convention. What with being the "head man" of the Indiana State Medical Association, and having some 1,200 of his folk come up for a little visiting, he had every reason to be elated.

EARLY arrivals at the convention looked in vain for a blond chap clad in a gangster's green sweater. Tom Hendricks, who for some years past has been thus adorned, received such a razzing at Gary last year that he decided not to wear said sweater into northern Indiana again.

THE COMMERCIAL exhibits presented an attractive picture in an airy, commodious hall. Exhibitors were more numerous than for many years past, and expressed themselves as highly pleased with the arrangements.

AS USUAL, the headquarters girls efficiently looked after the registration and also found time to assist in many other details in setting things in order. We have come to regard these young ladies as an indispensable part of our annual meetings.

AND NOW that the party is over, you should know that the mysterious "Convention Bill" turned out to be none other than John Hilbert in person!

THERE was an atmosphere about convention hall on Tuesday morning that spelled immediate success. Convention guests were registering in rapidly increasing numbers; exhibitors were kept busy demonstrating their wares, and the sun shone overhead. The changing of our convention date to the first week in October has proved to be a wise move. Too many of our folks disliked attending these meetings during hot weather.

THE STUDEBAKER CORPORATION went to town in grand fashion in endeavors to make the convention a success. Not only did they "loan" Dr. Hilbert for the full convention period, buy exhibit spaces, and arrange for a trip through their new, modern plant, but in many other ways they showed an active interest in our affairs.

THE TRIP through the Bendix plant, as well as that through the South Bend Bait Company plant,

attracted many convention visitors. Facts are that there were too many of these trips for one afternoon. The Bendix Corporation offers such a diversified product, while many of our own members were desirous of seeing their favorite fishing tackle in the making.

NO MATTER how early we arrive on the convention scene, George Daniels is sure to be there ahead of us, clad in full regimentals, ready to stop any fracas that may arise in the House of Delegates. George is the official killer of undesirable legislation.

LOCAL SOCIETY members were on their toes all during the convention, seeking in every possible manner to entertain the visiting members. Dr. Dave Bickel and Dr. John Hilbert, arrangements chairmen, spent their entire time on the job.

THE SOUTH BEND BAIT COMPANY had an exhibit of interest to the angling members of the profession. Among their displays were giant models of some of their famous baits which brought to mind a certain muskie that got away this summer!

CHAIRMAN ELLISON, of the Committee on Hotels, did a most excellent job of it. All requests for reservations passed through his hands, and final check was made to insure accommodations as requested.

SOUTH BEND entertained the Indiana State Medical Association in 1901 when the chief feature was a dinner which was served from 9 p.m. to 1 a.m. During the entire evening the South Bend Brass Band played in the lobby. Dr. J. B. Berteling was exhibiting one of the original invitations.

THOSE South Binders dug up a handy bunch of girls to look after the typing of registrations. They went at it like old timers. And they were easy to look at, too!

HERMAN BAKER blushed like a school boy when ushered into the House of Delegates after having been made president-elect for 1938.

WE are pleased to note the re-election of Drs. Sensenich and Hamer as A. M. A. delegates. We have a very good delegation in that body, one that is rapidly putting Indiana on the map. We maintain the notion that a good delegate should be continued just as long as he is good.

JESSE W. BOWERS showed up at the convention all out of breath—said it was because he was just back from his hunting trip in British Columbia. A friend of ours who only recently returned from the same hunting grounds tells a different tale; he says that Jesse got himself into a mess with a grizzly, and that the bear chased him to the U. S. border. As the narrator put it, "that Fort Wayne doctor probably is running yet!" There you have the two tales—write your own ticket.

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SPEAKING OF EATS, the Notre Dame folks did themselves proud in the matter of the dinner, itself. On all sides, as we were wending our way out, we heard the most favorable comments on the dinner. Few hotels of our acquaintance have done as well on similar occasions. The chef, maitre de hotel, or whatever his title on the campus, designed the dessert in a fashion entirely new to us—ice cream formed into a perfect skull. We noted that a few of the women folk shuddered a bit as they first attacked the delicacy, but their liking of ice cream overcame their timidity after a brief moment.

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PITMAN-MOORE displayed a group of exhibits showing numerous superstitions in medicine, some of which they declare are still in vogue in Indiana. Among them was a pair of old shoes which, inverted under a bed, will be found to be a sure cure for night sweats. Then there is the sulphur and molasses combination, said to purify the blood in the spring-time. Also the buckeye, carried in the left trousers pocket as a certain charm against rheumatism. As a youth we had our sulphur and molasses each spring, together with sassafras tea, the latter to "thin the blood." As for the buckeye, Lord bless you! We've carried one ever since we first wore pants—and haven't had the rheumatism yet!

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ONE convention addict of twenty-six years standing remarked upon his return home that this was his last convention. "So many of the older men are showing their age; some look very old. I'm quitting because I don't want other folk to look at me and place me in that class." However, this chap will be at French Lick, we'll bet two cookies!

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IT is little wonder that the St. Joe boys look so happy and well fed. We've met up with but few convention towns possessed of so many good "eat shops." We managed to breakfast, dine and sup at a dozen places, finding the food delectable in all of them, climaxed, of course, by that Notre Dame dinner! We'll be talking about that feast for a year to come!

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SAM KENNEDY, veteran convention attendant, is having a regular "field day." He spent the full

period at South Bend, the next week we met him at the Association of New York Central Surgeons, and he advised that he was leaving that meeting to go to the Pennsylvania Railroad Surgeons meeting in Philadelphia and Baltimore. As usual, Sam's petite and charming wife is accompanying him; she says she gets a real thrill out of these conventions.

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MANY were the pleasing comments we heard at the convention on the South Bend number of THE JOURNAL. We felt that this issue was just about "tops" and were pleased to learn that it met with such general approval. Such an issue costs real money, but we believe it is well spent.

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ONCE more we are appreciative of the courtesies of Dr. Verne K. Harvey and the Indiana Division of Public Health in loaning lanterns for use in the scientific sessions. As before, they were installed and operated by Mr. Bynum Legg and Mr. Noble Smallwood, of the Indiana Division of Public Health.

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CY CLARK appeared upon the scene, early Thursday morning, with a severe migraine, due to his having endeavored to participate in every form of entertainment offered during the convention. Cy declared that he had never before heard of breakfast at what he termed the "unholy hour of seven" and commissioned the writer to ascertain just who was responsible for the plan. Due investigation showed that the plan, now in operation for a good many years, was the brain child of a guy from Hammond, aided and abetted by another guy from Lafayette. Cy will no doubt be glad to have this information, that he may wreak due vengeance upon the perpetrators.

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"DROP in at my house a little while before the dinner, tonight," was a message handed about by most any St. Joe member. "We will have a little cocktail before dinner," was the inducement offered. Seems as how this little social custom was just about universally followed at South Bend—good custom, too, for those who like a little aperitif.

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THE ANNUAL BANQUET proved to be one of the major successes of the convention and the post-prandial program was of exceptional merit. A member who arrived rather late and sat in the extreme south end of the dining hall remarked on both the acoustic properties of the room (said he heard perfectly), and the fact that utter quiet was in order during the program. A long time ago the question of the annual banquet was up for discussion and many favored abolishing it. However, now it is one of the high lights of the annual meeting, and the Notre Dame party convinced the most unwilling that it is a permanent fixture in our convention programs.

THE LITTLE WOMAN who directed the Studebaker male chorus commanded our most ardent admiration for the manner in which she directed her program. Not content with using two arms, such as is customarily done by directors, she has developed her art to the point where each little finger, "wiggle" at the proper moment, elicits a response from an individual or small group. We watched very closely and soon discovered that she had one certain finger movement for one front row man, and when that finger was directed at him he immediately took off—and, boy, how he could sing! (This is not a musical review, since we know nothing about such things, hence we may have used some terms not commonly employed by music critics.)

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AMONG the many reports of reference committees there was one very much to our liking, that to which had been referred the report of the Publicity Committee. For a long time this has been our pet committee, since its work is productive of so much good; not only is it a storehouse of information for our members, not only do these men supply programs for any and all occasions, but their work does much to bring the Indiana State Medical Association before the public.

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A WEEK before the convention Olin West told the writer that he regretted he would not be able to get down to South Bend, since he would be on the West coast. Olin likes to drop in on Indiana, when her medical folks are assembled, and says he gets a thrill and a lot of new ideas from each visit. Had he been there this year we could have shown him a lot of new stunts. (Said stunts, by the way, were not of our doing, but things the other boys and girls were putting on.)

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HARRY HOWARD ran over to attend a few of the scientific sessions, took time out to clean up on a South Bender in table tennis. Harry claims to be champion of something or other, back home.

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THIS FENCING business, on exhibition at the stag smoker, got our goat. We know absolutely nothing about fencing and are wholly unfamiliar with the terms used in the sport. Some guy near us was continually naming this and that thing that occurred during the match, bout, joust or whatever it is properly called; we were certain he was wrong about it but our own crass ignorance of such things made argument impossible.

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DISCIPLES OF ROGET surely got a thrill out of the opening phrases of the address of Dr. Laing; never before have we heard so many new words and so many partially familiar words used in new places. His speech was one of the best things we have ever heard; it was sort of a Will Rogers talk in academic dress.

TOM HENDRICKS, normally implacable and unruffled, had one bad moment. A flagrant violation of exhibit rules was reported to the "blond boss." That young man arose in his might, his hair stood directly at right angles from his scalp, and he waded into the fray with a vim we had not known him to possess. The matter was righted, right now, but for an hour or more Tom was hard to get along with.

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DAVE BICKEL and John Hilbert, state and local chairmen on arrangements, came in for a lot of justifiable praise for their work, both before and during the convention. There are innumerable things to be looked after in such a job; none were shirked; they were all well done.

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THE JEFFERSON PLAZA proved to be a very good spot for convention purposes and the Columbia Athletic Club folks are to be commended for the manner in which they assisted in every way in making things go. Club employes were extraordinarily courteous, even going out of their way to favor the visitors. One of the bar boys remarked that he had never before served a finer group of gentlemen—he also included a few ladies in this—and that he hated to see the party break up.

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HERMAN MORGAN closed the last session of the House of Delegates with the customary motion that everybody be thanked for everything done for our comfort, edification and entertainment. However, this was no perfunctory matter, with Herman; he made it very clear that we had had no ordinary entertainment, that just about everybody in St. Joe county had stopped their daily tasks in order to attend to the very serious business of making nearly twelve hundred visitors glad they had come to South Bend. Morgan does such things with a grace possessed by but few folks, which means that it was exceedingly well done.

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"ABIE" GRAHAM milled about the convention as though he were two years out of medical school. We happen to remember that he was doing G. I. stuff a matter of forty years ago!

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DR. W. T. LAWSON, of Danville, a graduate of Miami Medical School in 1878, was an active participant of the proceedings. Dr. Lawson has held the office of secretary-treasurer of the Hendricks County Medical Society for 56 years, save for three years when he served as president!

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PERRY ROW ran over to hear the scientific programs and to renew friendships with the boys down Ripley County way.

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THE AMERICAN HOSPITAL SUPPLY COMPANY displayed a new type of hospital bed with full equipment for same.

HERSCH COLE blew in Monday afternoon with a flock of damsels; it developed that they were city nurses. Hersch says they were of the harmless variety, so all's well.

HORLICK'S AND BORDEN'S took care of the milk products displays, while MELLIN'S FOOD added another to the long list of exhibits they have made at our conventions. KAFFE-HAG was again with us, our folk taking advantage of the opportunity again to sample that delightful drink.

THE LEPEL folk had an extensive exhibit of their high frequency apparatus, attracting favorable attention.

RUEY CARTER tells a good one on himself. It seems that a prospective patient was telling a friend that she decided to call on a nerve specialist. The friend, who evidently knew the genial doctor, exclaimed, "Don't worry; Daddy Carter will be nice to you!"

THE SOUTH BEND PHARMACY CLUB, composed of some 36 local pharmacists, not only gave us an ad for the South Bend number of THE JOURNAL, but also had an exhibit space, featuring a prescription display.

WE'VE been looking at MEAD-JOHNSON exhibits since we were a little boy, so were expecting them to be on hand with their usual interesting display.

NEW and standard books were displayed by the W. B. SAUNDERS COMPANY and by LEA AND FEBIGER. Several new works were noted in each exhibit.

BABY FOODS were represented by HOMOGENIZED FOODS and by GERBER'S; that the little tots might not "kick the covers," the SNUGGLE RUG folk have devised interesting ways and means which they explained to the convention attendants, and their mechanical squirming baby was an interesting part of their exhibit.

ED LENT, long-time visitor at our annual conventions, was forced to spend but a few hours at the doings, because of a flock of carbuncles which have kept him at his own fireside for some two months.

"RUBINOFF and his violin" long since came to be one of the popular radio slogans. Our state convention has its counterpart in "Bunny Hare and His Hats." Where he manages to pick up these creations we do not know, but "Bunny" usually shows up with a hat of the gosh-awful variety.

For the first time in years, Hare failed to favor the South Bend party with his presence, and we heard a score or more inquiring as to his whereabouts.

"JACK" UPHAM, president-elect of the American Medical Association, seems to have been a classmate of Ed Clark's, down in Baltimore, and he took occasion to say some nice things about Ed, none of which were new to us, but they sounded very pleasant when coming from the A. M. A. head-to-be.

THE NIGHT SPOTS of downtown South Bend were very popular, we are told, though we are too advanced in years to ascertain such facts at first hand.

BARD-PARKER, with their "sure edge" blades, were on display, commanding an ever-attentive audience.

CIGARETTE smokers were constantly reminded that Philip Morris products are of especial interest to physicians.

WE had one big thrill when Norman Beatty, formerly of the Indiana State Board of Health, approached us with a query as to what changes had been made in "our antitoxin." We were sitting in the Lederle exhibit booth at the time.

COMPTON, of Frankfort, was heard to inquire at the information booth, "What is the nearest route to Socko Payne's place?" These South Bend folks do not like posers so, after scurrying about a bit, Compton was told to head in the general direction of Hammond.

FRED WEYERBACHER, holder of an Association job generally supposed to be a sinecure, was one busy boy at South Bend. Fred manages to get about the hotels and convention hall two or three times daily, seeing that everything is going on in a proper manner. Somehow or other, he finds it necessary to make several visits to the registration quarters where a bevy of girls is on the job. And Fred a bachelor!

THE LEDERLE folk, as usual, were on hand with their display of biologicals. They have been with us a long time and we hope to have them with us for years to come.

HEINZ displayed a number of their famous 57 varieties, among them being the strained vegetable products, ever-increasing in popularity in medical circles.

HERMAN MORGAN made a discovery in South Bend and was about ready to announce it, when he discovered that it might be a bit premature. He found what he considered to be the perfect candidate for the state association presidency, Dr. Billy Folz, a candidate who would fill the bill in any league. In fact, Herman made a speech at one of the late hour parties that find their way into most conventions, and there he introduced his find. After due reflection, Dr. Morgan has postponed further action until the French Lick session, but he says that after his candidate has made a few trips to the barber, he will be much more presentable.

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WE LIKE the selection of French Lick as the meeting place for 1937. Accommodations will be ample, the setting among the Cumberland foothills, plus the sense of rest and complete vacation that accompanies a visit to French Lick leaves little to be desired.

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THE GOLF COMMITTEE really went out into the highways and byways in collecting their assortment of prizes. So numerous were these that every player received a prize. Prizes ranged from a half dozen golf balls to fully equipped traveling bags, cocktail sets, and matched clubs. The annual golf tournament has come to be regarded as an important feature of our annual conventions, important because we agree that one day of the annual meeting should be given to social and recreational features.

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THE OLD ADAGE concerning idle hands was well borne out when "Alex" and "Mitch," who comprise the Vigo duo, stopped for some two hours in Indianapolis between trains. Having nothing else to do, they wandered hither and thither, thither finally landing them in front of a shop window wherein was displayed the most gosh-awful ties and handkerchiefs we have ever seen. Yes, they fell for them, and donned them immediately on reaching South Bend. We're betting neither will dare appear on the streets of Terre Haute thus arrayed!

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THE INDIANA STATE MEDICAL ASSOCIATION is very fortunate in having its two major committees, the Executive Committee and the Council, composed of men who are most consistent in their attendance. We have noted this matter of attendance over a long number of years.

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SEVERAL SUGGESTIONS have been made as to means of speeding up the business of the House of Dele-

gates, especially that of the first session. One member proposes that the appointment of reference committees be made well in advance of the meeting and that notices be sent to each appointee. This would result in the saving of more than a half hour. Another great loss of time occurs in the reports of officers and standing committees. These reports are printed in THE JOURNAL and also in the hand book. Less than five minutes is needed to stress the high spots in most of the reports, and since they are presumably studied by the reference committee and a recommendation made, little time should be given them in the first session. There are other spots where the proceedings may be markedly speeded up, with no loss in efficiency.

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ED CLARK, president-elect, says that his program for 1937 will be, in the main, a continuation of that carried out in the past few years. We are thus assured of a good start when Ed takes the wheel. And speaking of "wheel" reminds us that Edmund D. Clark long has been a wheel-horse in Association affairs. We recall way back when—nigh onto four decades ago—we sat at the feet of this man and listened to his discussions of the surgery of the time.

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FLOYD ROMBERGER, the same Romberger who is wont to orate about "the sovereign state of Indiana," is a devotee of the fistic art. During the bouts put on at the stag smoker, Rommy had a ring-side seat and his face reflected every movement made by the gladiators.

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YEP, it's true, but you'd never believe it! Davy Crockett has a new hat! For years we have been identifying the sage of Tippecanoe by his convention hat; we've seen it from coast to coast, so when he came into Convention Hall wearing a new light topper, we had to be introduced to the gentleman. Romberger accompanied Davy, wearing no hat, hence it may be suspicioned that, after all, Davy's new hat was only a borrowed one.

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CHESTER STAYTON says he never saw so much water on the way to and at the scene of a medical convention; they drove four hours through a blinding rain!

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We conclude these notes with the earnest wish that everyone who registered at South Bend this year will register at French Lick in 1937.

## PRESIDENT'S PAGE

### HEALTH EXAMINATIONS

The American Medical Association and the National Health Council endorsed the periodic health examination in 1922, and a manual and blank were prepared later for use in making the examination. Little progress has been made in establishing this procedure and opinions have differed as to its value.

*Reasons for failure to progress*—Discussion: Lack of enthusiasm on the part of the medical profession. Inertia on the part of the public, as well as the profession, encountered in the establishment of new ideas. Commercialism by privately owned agencies which invaded the field of medicine and sold varied health services to the public. Certain admittedly harmful effects resulting from giving to the lay individual reports of physical findings which he could not understand or evaluate. This tended to make him unduly health-conscious or apprehensive, or neurotic, in proportion as his individual psychologic pattern reacted to reports of physical findings often of no importance. What the individual needs is not a record of physical findings which he cannot understand, but recommendations as to steps to be taken or wholesome advice as to modes of living. If he is made nervous by this advice, he is or would be equally nervous without it.

The financial advantage accruing as a result of the hyper-health-consciousness established by detailed reports of physical findings was apparently early recognized by agencies selling such services directly to the layman. Consciously or unconsciously, this practice seems to have grown to some extent also into the methods of some medical institutions and practising physicians. The offensive commercialism, which usually creeps in if the medical profession does not give interest and either disapprove or direct such enterprises, awakened opposition to health examinations. However, it must be admitted that there is a definite need and place for the health examination in preventive medicine, and proper direction by the medical profession will tend to destroy objectionable commercialism.

The value of a health examination is proved by the frequency in which unsuspected diseases requiring treatment are found when large groups are examined. It is futile conversation to advocate early treatment of certain diseases if it is to be dependent solely upon the early self-diagnosis by an untrained and uninformed layman. Recorded examinations have never included a sufficiently large number of individuals to fix definitely their value in diminishing morbidity or increasing the average life.

The unpredictable character of certain diseases which may become manifest or cause death soon after a health examination, has been advanced by some physicians as an obstacle. This position seems untenable and no loss of professional prestige would follow a frank statement of the unpredictable character of certain health accidents or diseases. The conduct of routine health examinations in sufficient numbers is the only way that sufficient evidence will ever be accumulated to make possible the early recognition of abnormal conditions or the determination of the "life history" of certain diseases.

Some physicians have belittled the average health examinations as being insufficient in scope to be of value, and have advocated only complete examinations including much laboratory procedure such as specialists would require. The cost of such an examination would be prohibitive to the average individual. Experience proves that even among those able to pay the necessarily large fee, the individual will not undergo the multiple procedures, and it could not be popularized. Moreover, the experience of the life insurance companies has established beyond doubt the value of a minimal examination and over one hundred billion dollars of insurance is in existence on such a basis.

*Of the future*—Lay organizations, impressed by the results obtained in the reduction of deaths from tuberculosis, through educational methods, examination and early diagnosis, are now advancing similar plans for public drives against cancer, heart disease, and other diseases. If the medical profession does not provide the facilities for routine examinations by the general practitioner, public clinics will inevitably follow. The general practitioner can and should make these routine examinations, but they must be adequate, methodic examinations.

Nellis B. Foster, in discussing examinations, likened clinical medicine to music, and pointed out that a knowledge of harmony and that which makes up the science of music is not sufficient, but that technique must be mastered or there will be no music. In medicine, he stated, "There are many sources of error in diagnosis, such as errors in judgment, errors in analysis, errors in data, but the commonest of all are errors in technique."

The "Health Check" blank which was incorporated in my report to the House of Delegates was my effort to standardize a technique. It is not advanced as perfect, but, on trial, seems to offer some advantages. You may have a sample copy if you wish.

R. L. Denserwick

## REPORT OF THE PRESIDENT, 1936\*

Concerning those activities which were submitted to the House in October, 1935, by me, as suggestions for 1935 and 1936, and which were adopted as a specific program, I respectfully report as follows:

- I. *Elevation of Standards of Medical Work by—*
  1. More Effective Organization of Graduate Study in County Societies, also in a State Program.
  2. Encouragement of Members to Individual Study, Investigation, and Presentation of their Work before County Medical Societies.
  3. Improved Diagnostic Laboratory Facilities for Rural Areas.

Graduate study is a definite responsibility of medical organizations. The better it is organized and the more orderly its arrangement, the more effective it will be. Medical programs which do not follow some orderly arrangement as to subject, do not awaken sufficient interest or suggest collateral reading to supplement the brief presentations possible in meetings. The two subjects selected for study for the past year seem to have been rather widely accepted—they were not intended to exclude all other programs. The summation of the study of these two subjects in a Spring Graduate Study Meeting in Indianapolis was an outstanding success. Considering the fact that it was the first meeting of this arrangement in Indiana, the attendance was remarkable. The official registration, not including all who attended, was 653; 426 graduate physicians, 227 students. The program comprised intensive study directed by outstanding men whose work is everywhere recognized. The meetings of the afternoons and evenings were held at the Claypool Hotel. The Indiana University School of Medicine cooperated in holding clinics at the University in the forenoons of the two days of this session. I wish to express the appreciation and thanks of the State Association for the cooperation of the authorities of the University and the kindness of the members of its faculty who conducted clinics at the University. Members who attended the Spring Graduate Study Meeting were enthusiastic in their comments as to its helpfulness. This meeting should be continued each year. In attendance, in distinctive type, and in generally accepted usefulness, I am confident that it can be made the outstanding medical meeting of the central states without in any way detracting from the importance of the annual meeting.

County medical societies, whose programs contain only out-of-town speakers, offer to their own

members no encouragement to investigation or opportunity to develop facility in presenting medical subjects. The system of rotation of medical essayists among other county societies was offered as a means of encouraging better work by providing larger audiences. This work got under way late and encountered the difficulty that secretaries of county societies failed to give names of those who would be available for programs, and individuals were apparently too modest to offer their papers when not individually invited. Speakers were supplied where programs had not already been arranged. The plan is new but it is sound and can be organized to be of great constructive service. Obviously, its success will depend in great measure upon the encouragement local societies extend to their own members to prepare worthwhile studies.

Improved diagnostic laboratory facilities in rural areas was suggested as a possible program through cooperation of local and state health agencies with the medical profession. This could not be accomplished by the State Medical Association and would not be practicable as a project of the State Health Department, if local physicians are indifferent and do not organize their efforts to that end. Federal money for use in advancing public health is available to the State Health Department, and the physicians of a community might so organize their local agencies as to secure for their community a clinical pathologist who might also be made Health Officer, where need exists. The value of such an arrangement greatly exceeds that of any possible additional service offered at a distant central laboratory. The financing of such a project is not impossible. The helpfulness of a clinical laboratory in elevating the standards of medical services in a community is incalculable. Such facilities might prove sufficiently attractive to induce qualified young medical men to locate in rural communities and thus avoid the many objectionable schemes for government medical service to these groups. The establishment of such facility, if desirable, must be initiated by the County Medical Society.

### II. *Standardization of Periodic Health Examinations*

Preparation of a form.\* Suggestions as to practicability.

#### 1. From the Medical Viewpoint.

To be a practical method of obtaining the history and of making and recording the examination, so designed as to conserve the time of the physician.

To be sufficiently complete and medically satisfactory, although brief and not a specialist's study of specific functions.

\* Presented to the House of Delegates at the South Bend session of the Indiana State Medical Association, October 6, 1936.

\* Copy of the form may be obtained by writing to Dr. Senenich or to the headquarters office, 1021 Hume Mansur Building, Indianapolis.

## 2. From the Patient's Standpoint.

To be of value from a health basis.

To be obtainable within his ability to pay.

To satisfy his psychological need for a definite routine, and specific recommendations to be followed.

To avoid describing findings which he cannot understand, and which tend to establish a psychoneurosis.

## 3. From the Standpoint of Lay Societies.

To meet the medical standards set up in efforts to control cancer, heart disease, tuberculosis, rheumatism, and other specific diseases.

To offer health examinations by the regular physician as a substitute for an increasing number of lay-controlled clinics.

To bear a form and name which is distinctive, has sales value, and can be popularized as a health measure.

Periodic health examinations have been urged repeatedly in this and other medical associations, but have never attained the enthusiastic professional and lay acceptance to which they are entitled by reason of their importance. Much of this failure has been due to the profession itself. Each physician fixed his own standard for examinations. Influenced to some degree by the general level of his medical interest and work, it might be very good or so lamentably poor as to lead to the great dissatisfaction of the individual who was examined. Physicians did not encourage re-examination at a fixed time, and frequently did not consider the history or habits of the individual examined sufficiently to make any worthwhile suggestions for his benefit. The proper position of the periodic health examination in the general scheme of medical service seems never to have been sufficiently defined. As a consequence, some physicians specializing in internal medicine, and others in more restricted fields, have at times criticized plans of periodic examinations and forms used as being incomplete in that they did not provide for certain special clinical, laboratory, x-ray, and electrocardiographic examinations. Some have emphasized the point that an individual, given the average examination, might on the following day suffer an attack of angina or a coronary thrombosis, and thus bring discredit upon physicians. However, the most outstanding cardiologists state that the same accident might happen after the most complete cardiovascular examination. Certainly there would be no loss of prestige if the profession were to frankly admit that certain illnesses, from their very character, are sometimes unpredictable.

The experience of life insurance companies throughout nearly a hundred years should furnish dependable information as to the value of physical examination of only a moderate degree of completeness. There was, in 1935, nearly a hundred billion dollars of life insurance in effect, based upon limited examinations which did not generally include any laboratory procedures other than a

chemical urinalysis. Through the kindness of the officers of life insurance companies, statistics have been made available to me. From these it is determined that less than two and one-half per cent of the total deaths from those most unpredictable conditions, classified as angina pectoris and coronary artery disease, occurred within two years after the individuals had been determined acceptable for life insurance. Automobile and other accidents excluded, less than one and three-tenths per cent die from all causes within a year after they have been accepted for life insurance on the basis of an average insurance examination. No further proof should be necessary as to the value of a reasonably conducted periodic health examination.

The reasonable degree of completeness of examination must lie between the haphazard, carelessly done, valueless gesture at examination and the complete procedure at the hands of specialists, including much laboratory procedure and estimated to cost fifty or sixty dollars. The latter, obviously prohibitive in cost to many, has not met general acceptance, even among those who can pay such large fees. On a less complete examination, those who are found to have disease conditions will require additional laboratory procedures and special investigations. Definite recommendations, based on the findings of the examination, are necessary if it is to be of any practical value to the individual, having in mind that physical descriptions not understood serve only to confuse and frighten.

It is important to standardize the examination in such a way as to meet the practical requirements directed to the control of cancer, tuberculosis, heart diseases, etc., and avoid public clinics for this purpose. Lay organizations have indicated a willingness to adopt a program which is acceptable to the profession and which can be popularized as a health measure.

Physicians should be willing to cooperate in advancing periodic health examinations, as a means of improving the service to the public and placing medicine upon a better basis. Failure to do so encourages further inroads by lay organizations and government agencies.

I am attaching a blank for your consideration. It is not presented as a perfect product, but, on trial, it seems to have some advantages. Explanatory notes accompany the blank.

III. *Increased Public Educational Activities*

1. The Individual, through the Press, by Radio, and by supplying Medical Speakers to Lay Organizations.
2. To the Group, through Discussion of the General, Social and Economic Aspects of Health.

Through conference and mutual understanding to discourage the exploitation of the medical profession in free examinations and free immuniza-

tion offered to those who should pay for such service.

Progress has been made during the past year in presenting the medical viewpoint of social and economic problems. The efforts incident to the high school debates on socialization of medicine occupied a great deal of the time of those responsible for publicity in many societies. Much more can be done, and each medical society should have a Public Relations, Publicity, or other designated committee in charge of this work. Group conferences, to avoid institution of various drives exploiting the profession through free services, have been effective. Please read the report of the Bureau of Publicity.

#### IV. *Strengthening of the County Medical Societies Which Must Assume Responsibility for the Carrying Out of All the Projects Noted, and Many More.*

The comprehensive character of these suggestions, covering broad general lines of thought and direction of activity, will require well-planned effort continuing a long time into the future. For evidence of the constantly increasing activities and growing unity and strength of the County and State Medical Societies, I refer to the annual reports which fill thirty-seven pages of the September JOURNAL. I am happy to report that the State Medical Association and its component County Societies are in a stronger position today than at any other time in their history. I do not make this statement for the purpose of reflecting favorably upon my own term of office, as I am pleased to state that the place attained today is due to the cumulative efforts of many of my predecessors who have planned wisely and worked hard. Whatever progress has been made during my period in office has been possible only because of foundations created upon previous efforts.

#### MATTERS WHICH SHOULD RECEIVE CONSIDERATION

There are certain subjects which I should present for your consideration. These I will describe briefly.

The new state social security legislation made necessary the appointment of liaison committees from the State Medical Association. These committees were requested by the Department of Public Welfare, each one to advise within a limited phase of the public welfare administration. These committee changes make it advisable to survey and possibly rearrange some of the existing standing committees. New subjects deserve study—some committee chairmen suggest that the need for their committees may have passed. It might be advisable to designate one year as the period of existence for committees making specific studies, the committee to be terminated at the conclusion of that time unless there is reason for continuing the study. In this way, from year to year, new subjects might be assigned to committees for special investigation with the understanding that a report of their studies would be submitted in sufficient

detail that it could be filed for future reference. For instance, the study of industrial sickness would offer the opportunity for a valuable contribution, but would not necessarily require continuance of a permanent committee. Certain studies might be resumed at a later time, if indicated. All information developed in this manner should be filed in an accessible manner in the state office.

It is noted that although the Council is designated as the Board of Censors of the Association, its authority to act in this capacity is not clearly defined except in those cases in which "an appeal is taken from a decision of an individual councilor, . . ." (Chapter VII, By-Laws). Members of local societies sometimes find it difficult to institute action against members of their societies, admittedly guilty of unethical practice. As such practice frequently becomes of national importance through its effect upon congressional attitude, the American Medical Association has considered a plan extending the authority of the Judicial Council to take action against a member of a state or county society if necessity arises. This will come before the American Medical Association for final action at its next meeting. I recommend that a committee be appointed to study this situation and submit to the 1937 meeting such changes in our By-Laws as are deemed necessary to be effective and consistent with the authority given to the Judicial Council.

The criticism has been offered that the younger members are not attracted to the Annual Meeting. I have not had an opportunity to check this statement. I suggest, however, that every effort be made to build up the scientific exhibit, as a means of adding interest for the younger men. Consideration might be given to the matter of offering some kind of encouragement for good investigative work—not by first and second prizes, but in a broad way by general recognition for meritorious presentations in the scientific exhibit.

In conclusion: Although I still have some time to serve as president, this will be my last opportunity during my term to thank you for the great honors you have bestowed upon me and for the steadfast support you have given me as president. Because of the restriction imposed by ill health upon my predecessor, the beloved Doctor Leach, and his later death, I have served as your acting president for much of the past two years. In that time many new problems have arisen, necessitating many new activities. I have endeavored constantly to do that which seemed best for the profession, and in every instance I have had abundant evidence of your kindly interest and your wholehearted cooperation in the things I have tried to do. For whatever I have put into the work of the Association, I have been more than repaid in the friendships I have been privileged to enjoy.

Respectfully submitted,

R. L. SENSENICH.

## CANCER CONTROL IN INDIANA

F. L. RECTOR, M.D., FIELD REPRESENTATIVE,  
AMERICAN SOCIETY FOR THE CONTROL OF CANCER



A marked change has taken place in public thinking and professional approach to the cancer problem during the past ten years. Physicians are finding more hopeful results from their treatment and the public is developing a more understanding attitude toward the problem.

*F. L. Rector, M.D.* Much of this change on the part of the public has been due to the quiet but constructive work that has been carried on by various groups. Physicians have done much to educate their patients by offering more hope for a cure as new information about the control of cancer came to light. The American Society for the Control of Cancer has also contributed to this educational work by a conservative program of enlightenment of the profession and the public. Public groups, particularly those composed of women, have responded most satisfactorily to these educational efforts.

In the past, the efforts of medical organizations and the American Society have been carried forward more or less independently, although the latter organization has planned its programs with full knowledge and approval of the medical groups. Now the time has come to join forces for a determined assault on the ignorance and fear that keep the public from seeking help when it can do the most good with the object of making available to all the people of Indiana the facts about the prevention and control of this disease. The Indiana State Medical Association, through its Cancer Committee, is cooperating in this work by furnishing consultation for and direction of a new group of interested people throughout the state. The women of Indiana are being formed into the Indiana Division of the Woman's Field Army Against Cancer of the American Society for the Control of Cancer. Their objective is to enlist the interest of all women's organizations to bring the facts about prevention and control of cancer to all groups able to comprehend their significance.

The State Federation of Women's Clubs has taken the initiative in the formation of this army. All state-wide women's organizations are being invited to join in this work. Mrs. George Dillinger, of French Lick, who has long been active in club organization work in the state, has been appointed Commander of the Indiana Division. She is appointing vice-commanders in areas corresponding to the Council or districts of the Indiana State Medical Association, who in turn will organize the work under captains in counties and towns.

Dr. F. L. Rector is cooperating in the development of the Woman's Field Army in this state. He devotes full time to the work of the ten states comprising his district.

The Woman's Field Army program is being organized under direct supervision of the Cancer Committee of the State Association, and it has been named the executive committee under whom Commander Dillinger works. Her vice-commanders and captains in local areas will have an executive committee representing the medical societies in their respective areas. This arrangement is a new and unique one in Indiana and indicates that the program of the Woman's Field Army will be under supervision and control of regular medical organizations.

The activities of the Woman's Field Army will be primarily educational. Through a series of mass meetings, lectures, radio broadcasts, newspaper and magazine articles, exhibits and distribution of literature, an intensive educational campaign is to be carried on. The fear of cancer which causes such an alarming mortality is based on mystery and mystery is based on ignorance.

A drive for enlistments in the Army at one dollar each will be held annually beginning in the spring of 1937, and the following distribution of funds will be made:

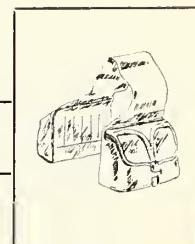
Seventy per cent returned to the states for their own programs;

Ten per cent placed in a contingent or reserve fund;

Twenty per cent retained by the American Society for expenses involved in the field.

Realizing that early recognition and treatment offer the best hope for controlling cancer, the periodic examination will be stressed, and it is believed that thousands of men and women will seek such examinations at the hands of their physicians. This will provide a real opportunity for Indiana physicians to show their interest and cooperation by making such examinations when requested to do so. Let it never be said that a member of organized medicine refused to make such an examination when called on to do so!

With cancer causing almost 4,000 deaths in this state each year, with it occupying second place as a cause of death in Indiana and the nation, with a knowledge that at least 1,500 to 2,000 of these deaths are preventable, a challenge is flung to the medical profession and intelligent public groups to coordinate existing facilities for the control of this disease so as to bring down the frightful mortality. To this end the Woman's Field Army is pledged, and it calls on all other groups to assist it in its battle to save precious lives.



## Indiana Medicine in Retrospect

L. G. ZERFAS, M.D.  
Historian, Indiana State Medical Association

### FIRST MEDICAL DISTRICT SOCIETY\*

#### LAWRENCE S. SHULER—VINCENNES AND TERRE HAUTE

Dr. Lawrence S. Shuler was one of the most active and able pioneer physicians in Indiana. He was born in Montgomery County, New York, in 1790. He completed his medical studies and received a diploma from the College of Physicians and Surgeons, New York, in 1815. He arrived in Vincennes during the winter of 1817, as the announcement of the opening of his office appeared in the *Western Sun*, May 10, 1817, as follows: "Physician, Surgeon and Accoucheur; late from New York. Respectfully informs the inhabitants of Vincennes and its vicinity that he has commenced practice in this place and now occupies a room in the house of J. Bond where he will at all times cheerfully attend to those who may call on him. He hopes by unremitting attention, his knowledge, and experience in the different branches of his profession to merit a share of the public patronage. Those residing at a considerable distance wishing to employ him are assured that the best assistance will be afforded on the most liberal terms. Advice in all cases given gratis."<sup>1</sup>

Dr. Shuler married Miss Sally Cunningham, daughter of Francis Cunningham, of Vincennes, November 30, 1820.

At the first meeting of the First District Medical Society at Vincennes, June 2, 1817, Dr. Shuler was granted a license by the censors, elected secretary of the society, and appointed on the board of censors. He immediately entered wholeheartedly into the activities of the society. He served in the capacity of delegate to the State Medical Society and took an active part in its formation. He was president of the First District Medical Society in 1819 and 1823, and president of the State Medical Society in 1826 and 1827. He made a strong appeal to the physicians of the state to reorganize the various district societies, following the changes provided by the law of 1825.

Dr. Shuler formed a partnership with Jeremiah Wood and John D. Woolverton, operating an apothecary shop in conjunction with their practice. The shop was located on Water Street. On July 22, 1820, this partnership was dissolved, but Shuler and Woolverton continued to practice together until Dr. Shuler removed to Terre Haute in 1822 or 1823. Dr. Shuler was an outstanding pioneer surgeon in Indiana, and very probably from all ac-

counts, led in this branch of practice. "For several years," wrote Dr. Ezra Read, "Dr. Shuler commanded the surgery of a very large scope of the country, being eminently and justly entitled to it. To his perfect knowledge of anatomy he added a hand that never tired, a nerve that never flinched, even in the most difficult and dangerous operations. No man ever performed more difficult or more critical ones or was ever more successful in those which he did perform. Yet, in regard to them, he was modest in the extreme; and an operation which would have added to the fame of a Richerand, a Sir, a Cooper, or a Physick, is known only to the profession through those few living witnesses whom curiosity, or desire for information, may have called round the operator's chair. His practice, too, as a physician was alike successful, and very extensive. The science of medicine in this section of the west has been very much benefited by his labours than which none can better testify than those of the profession who have frequently met him at the sickbed, or conversed with him upon the subject of medical philosophy." The above comments appeared in the *Western Sun* following Dr. Shuler's death.<sup>2</sup> He is said to have removed a very large abdominal tumor from a woman in the seventh month of gestation, prior to 1827. The woman recovered, gave birth to a healthy child and was still living near Vincennes as late as 1874.

At the meeting of the State Medical Society December 16, 1826, when he was president, he read a paper, entitled, "Case of a False Joint." This paper was published in the *Indiana Journal*, January 5, 1826, but the operation was performed in 1822.<sup>3</sup>

In a letter addressed to Dr. Shuler, 1823,<sup>4</sup> Dr. Thomas B. Thompson, of Princeton, Indiana, described a most peculiar case about which he requested Dr. Shuler's advice. Dr. Shuler visited the patient and wrote out his opinion which was published in the *Western Sun and General Advertiser*, December 13, 1823, because of the widespread public interest. The communications are here reproduced chiefly because they give an insight into the mental processes and training of medical men of the times. The case was probably one of vicarious menstruation.

<sup>1</sup> *Western Sun*, Vincennes, Aug. 11, 1827, p. 3, c. 1.

<sup>2</sup> Transactions, Indiana State Medical Society, 1874, p. 45. Kemper, *Medical History of Indiana*, pp. 66-68.

<sup>3</sup> *Western Sun and General Advertiser*, Vincennes, Dec. 13, 1823, p. 3, c. 2.

Princeton, Nov. 25, 1823.

Doctor Shuler:

Sir: A case has fallen under my observation in the neighborhood of this place, which in its character is certainly extraordinary, and has, to a very considerable degree, excited the public curiosity—with a brief statement of which I take the liberty of troubling you.

Miss M. S., aged 13 years, a member of the family of the Hon. William Prince, a robust healthy girl, of a full, plethoric habit, was on Friday, the 7th instant attacked with a hemorrhage from the cheek, immediately under the left eye, from a surface of from four to six inches in circumference, of a very florid arterial colour, and in such a quantity as in a few minutes to cover the whole surface of the cheek. This continued at short intervals of from ten minutes to two hours, until the evening of Friday the 11th; and on the morning of Wednesday the 12th in addition to the hemorrhage, pieces of completely formed, and apparently healthy bone, together with lumps or masses of flesh, of various sizes (in weight from two grains to a drachm and a half) and in structure completely fibrous, and also apparently healthy, made their appearance at distinct intervals, on the external surface of the cuticle; generally about half an inch from, and immediately below the inner corner of the eye—sometimes, however above, and occasionally (though seldom) immediately in the inner corner. The pieces of bone were of a ragged, or fractured appearance, and were always attended with, and not unfrequently enveloped in a mass of black grumous blood; the masses of flesh were unattended with anything of the kind. The intervals between the appearances were various from ten minutes, to two, or three or four hours, and sometimes longer, and no regularity was observed in the order of succession between the pieces of bone, and masses of flesh. These discharges were so very sudden and instantaneous that the closest and most minute observation could not discover their commencement. These appearances continued until Wednesday the 21st, after which time, until Sunday the 25th nothing of the kind appeared. On the morning of the 25th pieces of clear transparent, cartilaginous like substances, of various sizes, from the smallest particle to that of an ordinary sized grain of corn, in rapid succession, made their appearance, immediately in the inner corner of the eye, producing at the moment of their passage, a slight degree of pain, in consequence only of the pressure upon the eye ball at the instant of their passage. These discharges or appearances were also at no regular intervals, and were unattended with, or accompanied by, either the lumps of flesh, or masses of clotted blood before mentioned.

During the whole of this time which embraced a period of about three weeks the girl enjoyed perfectly good health, free from either soreness, pain, swelling, or depression of the cheek, discolouration of the skin, or any unusual appearance whatever, but pursued without the least inconvenience, her usual avocations.

Thus I have given you, in as brief a manner as possible, the principal characteristics of the case which has excited so much curiosity in this county—and would be glad, if convenient, you would visit the patient. I am, yours with respect.

Thos. B. Thompson.

To the Editor of the *Western Sun*:

Sir—This communication together with the accompanying letter from Dr. Thompson, I send you, to make use of, as you may think proper. To allay, and satisfy public curiosity, excited so much by the publication of Gen. R. M. Evans, is my only apology for obtruding myself upon your notice. I visited in company with Dr. Decker, the girl who excited such uncommon attention, on the evening of the 27th of November, and the following morning witnessed one of the appearances mentioned. She was pursuing her ordinary business about the house, and I had just time to rise from my seat, and examine her face, after she said, to use her own expression, that "one was coming," before I saw pass from between the lid and ball

of the eye, near the outer corner, a small semi-transparent cartilage, half the size of a large grain of corn—water was trickling from both eyes, apparently caused by the irritation of this cartilaginous body. Upon examining the inner surface of the eye lid, with a small magnifying glass, its vessels were slightly turgid, flabby, bearing the appearance of having been distended—no other uncommon appearance was observable. Upon enquiry the statement of Gen. Evans, published in the *Evansville Gazette*, and the facts detailed to me in the letter from Dr. Thompson, were substantiated by several persons of respectability. The only additional fact that I could collect relative to this extraordinary case, is that about ten months previous, a slight hemorrhage took place from the ear, preceded by a few drops from the eye.

That this case, which must certainly be termed extraordinary, should excite public curiosity, is not surprising; nor is it surprising that those who witnessed it should call upon the "sons of Esculapius" to "solve the mystery"; but to those acquainted with the nature and operations of the human system, I think it will not appear mysterious.

Bone has been formed in almost every part of the human system, in parts the most vital, as well as those whose functions are not so important. The heart, the large arteries, the stomach, the lungs and the brain, have each been distinguished by bony formations. Why then may there not be, as in this case, a regular formation of bone exterior to the skin "the calcarous phosphate of which bone consists is deposited from arteries; but previous to the deposition, the arteries are distended; and those which before did not carry red blood, are now visible from their containing this fluid." This is particularly applicable to the case of the girl. The exhalent arteries throw out "florid arterial" blood; and in a short time they deposit osseous material upon the surface of the skin. So far it resembles the regular process of nature. But how is it formed exterior to the skin? By the same means, the same system of vessels and by the same laws that form bone upon any of the internal membranes, instances of which have been frequently observed. It is true, the usual formation is in some part, which part is absorbed, and bone deposited in its place—but when we consider that the particles of bone are completely formed and circulate in the arteries, that they are even discoverable to the edge of the knife floating in the blood—is it at all mysterious that they should pass out of the enlarged exhalent arteries to the surface of the skin; and that the instant those particles pass the mouths of the vessels they should unite, and form one solid mass, by the same power, by which all hard homogeneous bodies unite and are held together. If the vessels of the skin exhale blood, so may they exhale bony particles—as the former occurs frequently, it produces little surprise; the latter is rarely seen, and our wonder is excited. If there had been any hole or aperture, or soreness, or other diseased appearance, it would then have been an unaccountable case; but on the contrary, the parts being sound and healthy, show conclusively, that it is a natural, but misplaced action; that nature is carrying on her usual operations, of forming from the blood, flesh, cartilage and bone; but that she does not deposit these formations in their proper places. Such variations are common, though not often so extensive, or so rapid. As it would be difficult to conceive how this calcarious matter could circulate without floating in some fluid, so we find that each piece of bone is attended by a quantity of black grumous blood; showing that the phosphate of lime, of which bone is principally formed, had united, leaving the blood to envelope it.

The different sizes and fractured appearance of the bones, depend on the quantity of osseous matter emitted suddenly from the mouths of the vessels, and as some vessels emitted greater quantities and with more force than others, so would the bone have more or less of a broken texture. No time was necessary for their formation; they were already formed, though existing in very small particles. No action of vessels, access of air or fluids, was

(Continued on page xxvi)

## DIPHTHERIA IN SEPTEMBER, 1936

There were four deaths from diphtheria in the month of September. One comes from each of the following counties: Lake, Marion, Montgomery and Monroe. This makes a total of seventy-one for the year.

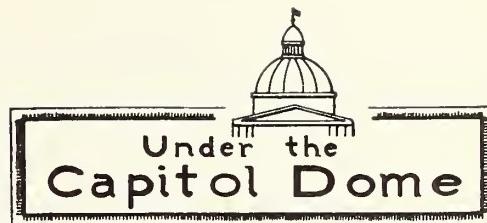
Inasmuch as there were no deaths in August, it means we have gained up to the amount of eleven fewer deaths for August and September of this year as compared with the same months last year.

Early in this year we were considerably discouraged with the diphtheria prospects but for the last five months we have definitely fallen under the corresponding months of last year. It begins to look as if we have a fair chance of making a new record. There at least appears to be less diphtheria out over the state than there has been at this season for the last several years.

Below you will find a tabulation by counties showing where the deaths have occurred:

County	No. for Month Sept., 1936	No. for Year 1936
Allen	0	3
Benton	0	1
Brown	0	3
Cass	0	1
Clark	0	1
Delaware	0	1
Dubois	0	1
Elkhart	0	2
Grant	0	1
Greene	0	2
Howard	0	4
Jennings	0	1
Knox	0	1
Lake	1	5
Lawrence	0	3
Madison	0	4
Marion	1	11
Martin	0	1
Monroe	1	2
Montgomery	1	4
Owen	0	1
Parke	0	2
Pike	0	1
Ripley	0	1
St. Joseph	0	3
Tippecanoe	0	4
Vanderburgh	0	3
Vigo	0	1
Warren	0	1
Washington	0	1
Wayne	0	1
Totals	4	71

THURMAN B. RICE, M.D., Chairman,  
*Diphtheria Prevention Committee.*



The state division of public health will sponsor a bill in the forthcoming session of the General Assembly that will authorize county commissioners to establish sewage and water supply districts.

Purpose of the measure, it was explained by B. A. Poole, chief sanitary engineer of the health division, is to make possible the construction and operation of public water supplies and sewage systems in thickly populated but unincorporated areas, especially such areas as lie near the larger cities of the state. Under present laws there is no method of financing either water or sewage systems in such areas and the needs for them are very great, Mr. Poole said.

The plan would be somewhat like the drainage district law, which authorizes county commissioners to establish drainage districts. Bonds could be issued by the districts to provide funds for construction purposes. In the case of water systems the bonds would be retired through earnings.

A similar plan has been in successful operation in Ohio for the past few years, Mr. Poole said. During the last session of the Indiana General Assembly such a measure was introduced in the House of Representatives, but, because of the lateness of its introduction, it got only to second reading.

List of medical students who successfully passed examinations given by the state board of medical examination and registration and who have been issued licenses to practice medicine in Indiana, has been announced by the board.

Those granted licenses were:

### Indiana School of Medicine

Adler, Raymond N.	Erdel, Milton William
Arbogast, John Lynn	Egbert, Herbert Lowell
Bard, Frank Bruce	Ferry, John Lumice
Barkley, Douglas F.	Fiel, Charles A., Jr.
Beams, Ralph H. Curie	Fish, Edson Clement
Billings, Terrence E., Jr.	Folkening, Norval Christian
Bowman, Charles M.	Furnas, Naomi Doan
Brenner, Andrew Max	Ganz, Max
Brocksmith, Henry A.	Gery, Richard Eaton
Brown, David Bruce	Gettelfinger, Ralph A.
Bundrant, Herschel B.	Firstein, Ben
Childs, Wallace Edward	Gold, Simon
Cockrum, William Marion	Goodwin, Merrill Harry
Cohen, Bernard William	Griffith, Ross Earl
Conley, Thomas Marion	Hanner, Joseph Myron
Conway, Chester Case	Hart, Lenpha Paul
Crays, William Harold	Hash, John Shore
Doktor, David	Haymond, Joseph Layton
Davis, John Archibald	Hild, Gilson
Denzler, Sherman Russ	Hippenstein, Ralph Owen
Donato, Albert Mario	Holsinger, Robert Emmett

Humphreys, John Wesley  
 Jackson, Abraham  
 Johns, Richard Blackwell  
 Jones, Craig S.  
 Kauffman, Sidney Albert  
 Kelly, Wendell Culmer  
 Kirtley, James Marion  
 McKittrick, Jack  
 Klor, Samuel J.  
 Kraft, Ralph William  
 Lamber, Chet. Keller  
 Life, Homer Lawrence  
 Maly, Charles Henry  
 Mason, Everett Elmore  
 Mattox, Don M.  
 McFadden, James M.  
 Meyer, Orlando Lott  
 Miller, Charles Jacob  
 Moehlenkamp, Charles E.  
 Morton, Richard Everett  
 Murphy, Josephine F.  
 Myers, Robert K.  
 Nusbaum, Francis Wayne  
 Oliphant, Robert Wynn  
 Omstead, Milton Harvey  
 Openshaw, James Francis  
 Pasternack, Elroy  
 Peacock, Norma Franklin  
 Pollak, Lewis  
 Price, Robert Morgan  
 Ratcliffe, Albert W.

Reich, Clarence Edward  
 Renbarger, Lester Leon  
 Rendel, Donald T.  
 Rice, Clayton Leroy  
 Rinne, John I., Jr.  
 Rollins, Russell  
 Rosenthal, Irwin I.  
 Roudebush, Marion  
 Scott, George Everett  
 Scott, Ivan Winfield, Jr.  
 Seaman, James Bernard  
 Shields, Jack E.  
 Shortz, Gerald  
 Smith, William Benjamin  
 Spahr, Donald Edwin  
 Spolyar, Louis William  
 Stiver, Daniel DeWit  
 Stoelting, Vergil Kenneth  
 Tepfer, Milton  
 Thompson, John Madison  
 Tomlinson, Forrest  
 Turner, Robert D.  
 VanNuyts, John Ditmars  
 Wagner, Herbert Theodore, Jr.  
 Walther, Joseph Edward, Jr.  
 Watson, Herman Lowell  
 Weddle, Charles Otho  
 White, Harvey Eugene  
 White, James Vincent  
 Zweig, Elmer Sam

*Out-of-State Candidates*

Dainko, Alfred Joseph  
 Gherman, Emanuel M.  
 Goraczewski, Thaddeus C.  
 Grassgreen, Irvin M.  
 Lucas, Alphonse Frank

Mishkin, Irving  
 Panares, Solomon Veloso  
 Scheetz, Marion Robert  
 Van Nest, Willard Arnold

**MEDICAL PROGRESS (Sensenich)***(Continued from page 562)*

minister to him than someone designated by a political state. No medical service provided by a state has ever been qualified to claim that it was the best medical service, nor can it be proved that any state-controlled medical service has progressed in the quality of service rendered, to a degree comparable to that which was not thus politically controlled.

It is evident that if the practice of medicine is to survive, as it will survive, it will be dependent upon the maintenance of its relations with the individual on a high moral plane, the quality of its service, the honesty of its business dealings, and the strength of its organization in maintaining its position against inequitable social adjustments. It will be imperiled in proportion to its acceptance of politically enforced regimentation and schemes of insurance planners, or its compromising commercial contracts with employers or exploited employe groups, in lieu of adequate wage scales.

**SECRETARIES' COLUMN**

The South Bend meeting was unusually well attended in spite of rain. The program was excellent. If you did not attend, you missed something.

Congratulations to Dr. H. M. Baker on his election as president for 1938 of the Indiana State Medical Association.

How many secretaries have read President Roosevelt's speech at the dedication of the Medical Center in Jersey City, on October 2, 1936? How many read the editorial in the *A. M. A. Journal* for October 10, 1936? Both are worthy of your time and study.

Mark your calendar now so you won't forget the annual Secretaries' Conference, to be held on January 31, 1937, at Indianapolis. Jot down any questions or problems you want answered at this meeting. This meeting is for your benefit. It is hoped that all the vital problems involving the medical profession can be discussed at that time.

Have you any suggestions for the Secretaries' Conference? If you have, send them to the executive secretary, Mr. Hendricks, for consideration. The program for the Secretaries' Conference will appear in the January issue of *THE JOURNAL*.

The Chicago *Tribune* for October 11, 1936, had a very good article on "The Panel System in England." Did you read it?

It is not too early to begin thinking about the collection of dues. Make your society the first 100 per cent society in 1937!

Don't neglect to send to headquarters office the reports of your society meetings as soon as possible after the meetings are held.

And don't forget to VOTE!

*Unwatched*

*Chairman.*

## DEATHS

WILLIAM G. SWANK, M.D., of Crawfordsville, died September fifth, aged seventy-six years. Dr. Swank graduated from the Beaumont Hospital Medical College, St. Louis, in 1892. He had served as surgeon for the Missouri and Pacific Railroad, and as city health officer of Crawfordsville. He had retired from active practice.

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JAMES SMITH, M.D., of Franklin, Indiana, was killed by an automobile, September twenty-fifth. He was eighty-five years of age.

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JESSE S. FLORA, M.D., of Kokomo, died September fourteenth, aged sixty-six years. Dr. Flora was a graduate of the Eclectic Medical College, of Cincinnati, in 1892.

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STANLEY GRAHAME, M.D., formerly of Summitville, was killed in an accident near Hazard, Kentucky, September twenty-third. Dr. Grahame was twenty-nine years old. He was serving as a medical director of a CCC camp in Wooten, Kentucky, and was planning to re-establish his practice in Summitville soon. He was a graduate of the Indiana University School of Medicine, Indianapolis, in 1933.

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WILLIAM F. McBRIDE, M.D., of Dayton, Indiana, died in a Lafayette hospital, October fifth. Dr. McBride was sixty-five years old. He was a former coroner of his county, and was a past president of the Tippecanoe County Medical Society. He was a member of the Indiana State Medical Association and a Fellow of the American Medical Association. Dr. McBride graduated from Rush Medical College, University of Chicago, in 1895.

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JAMES L. GILBERT, M.D., of Logansport, died October thirteenth at his home after a brief illness. Dr. Gilbert was sixty-five years old. He had served as captain in the medical corps during the World War. He graduated from the University

of Cincinnati Medical School in 1894. He was a member of the Cass County Medical Society, the Indiana State Medical Association and the American Medical Association.

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JAMES H. ASHABRANNER, M.D., of New Albany, died September thirtieth after a long illness. He was seventy-five years old. Dr. Ashabanner graduated from the Eclectic Medical College, of Cincinnati, in 1899. He had been a member of the Floyd County Medical Society, the Indiana State Medical Association and the American Medical Association.

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JOHN W. LUCAS, M.D., died suddenly at his home in Brookville, October first, aged fifty-five years. He had retired from active practice five years ago because of ill health. Dr. Lucas graduated from the Indiana Medical College, Indianapolis, in 1907. He was a member of the Franklin County Medical Society, the Indiana State Medical Association, and the American Medical Association.

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CHARLES R. VICKERY, M.D., of South Bend, died October tenth, aged sixty-six years. Dr. Vickery was a graduate of the Hahnemann Medical College, Chicago, in 1901. He was a member of the St. Joseph County Medical Society, the Indiana State Medical Association and the American Medical Association.

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FRANK KENNEDY, M.D., of Goodland, died October fourth after a short illness. He was fifty-six years of age. Dr. Kennedy was a member of the Jasper-Newton County Medical Society, the American Association of Railway Surgeons, the Indiana State Medical Association, and a Fellow of the American Medical Association. He graduated from the Medical College of Indiana, Indianapolis, in 1902.

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LEE W. ROLLER, M.D., of Richmond, died October fifteenth, aged sixty-two years. Dr. Roller served with the Army medical corps during the World War, after which he established his practice in Richmond. He graduated from the Kansas Medical College, Topeka, Kansas, in 1905.



## HOOSIER NOTES

Dr. Frank W. Oliphant has located in Mount Vernon where he will practice medicine.

Drs. C. H. and S. M. Bockoven, for ten years practicing physicians in Plymouth, Indiana, have moved to their new home in Phillipsburg, Ohio.

Dr. Francis B. Mountain has opened an office for the general practice of medicine in Connersville.

Robert E. Neff, formerly of Indianapolis, has been elected president of the American Hospital Association.

Dr. E. F. Jones has moved from Marion to Richmond where he will be on the staff of the Richmond State Hospital.

Miss Gladys Behlmer and Dr. William McConnell, both of Sunman, were married September twenty-fourth.

Dr. Kermit Perrin, of Fort Wayne, and Miss Marie Kronk, of Fort Wayne, will be married November first.

Miss Jane Elizabeth Walker and Dr. Philip L. Kurtz, both of Indianapolis, were married July fifteenth.

Dr. H. P. Bowser has been appointed New York Central physician and surgeon in Goshen, Indiana, to succeed the late Dr. E. E. Ash.

Dr. W. K. Sennett, of Macy, and Miss Gladys Baxter, of Shelbourne, Indiana, were married in Indianapolis, September seventeenth.

Dr. M. L. Habegger, of Berne, has added to his office space to include rooms for surgical work and for hospital beds.

Dr. Herman Goldthwaite, of Marion, and Miss Mary Barley, of Marion, were married in September.

Dr. Harry Brandman, of Whiting, has taken charge of the office and practice of the late Dr. M. A. Given, of East Chicago.

Dr. H. G. Hamer, of Indianapolis, has recently returned from a meeting of the International Urological Society which met in Vienna, Austria.

Dr. and Mrs. S. D. Malouf and their two daughters have returned to Peru after an extended visit in Vienna, Austria, and in other European countries.

Dr. J. W. Bowers, of Fort Wayne, has returned from a six weeks hunting trip in the Peace River district of Northeastern British Columbia, his twenty-sixth trip into the wilds.

Miss Helen Louise Butz, of Kendallville, and Dr. Guy E. Ross, of Kendallville, were married March 8, 1936, at Danville, Indiana. Announcement of the marriage was made recently.

Dr. Bertha Rose has been made assistant to Dr. O. B. Nesbit in the Gary schools medical department. Dr. Rose had been a school physician in Michigan City for a number of years.

Dr. Richard C. Travis who has been practicing in Reading, Pennsylvania, has established himself in Indianapolis where he will be associated with Dr. Ernest Rupel in the practice of urology.

The Indianapolis Medical Society dedicated its new quarters in the Antlers Hotel at a dinner meeting, October thirteenth. A reception was held for members and their families. Dr. Virgil Simpson, of Louisville, presented an address on "The United States Pharmacopoeia."

The First District Medical Society held a meeting at the McCurdy Hotel, Evansville, September eighth. The following officers were elected: President, G. C. Johnson, Evansville; vice-president, O. T. Brazelton, Princeton; secretary-treasurer, K. T. Meyer, Evansville; councilor, I. C. Barclay, Evansville.

Dr. J. C. Bucher, of Wheatfield, Indiana, celebrated his eighty-third birthday, October third. Dr. Bucher has retired from active practice after completing fifty-eight years of work in his profession. He graduated from the Ohio Medical College class of 1878.

Dr. G. M. Young has announced the opening of his office for the general practice of medicine at 56 West 56th Street, in Indianapolis. Dr. Young was located at Brownstown, then worked with the medical reserve corps in CCC camps before locating permanently in Indianapolis.

The fall program of demonstrations and lectures in medicine and surgery which are given annually by the staff of The Mayo Clinic is announced for November 9 to 13. All physicians are invited to attend these sessions which have come to be regarded as one of the best intensive post-graduate studies in the country.

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The Central State Hospital, of Indianapolis, has been appointed by the Surgeon General of the United States Public Health Service as a collaborative member of the Cooperative Clinical Group of America. The laboratory of the hospital has been assigned the investigation of highly specialized problems in the field of syphilis.

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The Fifth District Medical Society held a meeting October 13, at St. Anthony's Hospital, Terre Haute. The following officers were elected: president, Dr. A. W. Cavins, Terre Haute; vice-president, Dr. Harry H. Ward, Coalmont; secretary, Dr. James V. Richart, Terre Haute; councilor, Dr. O. O. Alexander, Terre Haute, who will serve for the term expiring December 31, 1939.

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A book on "Medical History of Sullivan County," by Dr. James B. Maple, has just come from the press. It includes records of early fee bills, remedies, biographies of Sullivan County physicians, history of the county's hospitals and of the medical society, and it contains innumerable little personal items which make the book unusually interesting.

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Doctor Leon G. Zerfas, director of the Lilly Laboratory for Clinical Research of the Indianapolis City Hospital, Mrs. Zerfas, and their son, Charles, sailed from New York October third for England, where Doctor Zerfas will devote his time for the coming year to biochemical and physiological research in association with Sir Frederick Hopkins of Cambridge University. They expect to return to the United States next September.

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The next written examinations by the American Board of Obstetrics and Gynecology will be held on Saturday, November 7, 1936, and on Saturday, March 6, 1937. The next general examination for all candidates (groups A and B) will be held in Atlantic City, New Jersey, June 8 and 9, 1937. Application blanks may be obtained from Dr. Paul Titus, secretary, 1015 Highland Building, Pittsburgh (6), Pennsylvania.

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Indianapolis had the largest delegation of any city on the post-convention cruise taken to Bermuda following the convention of the American Academy of Ophthalmology and Otolaryngology.

Included in the party were Dr. and Mrs. Sidney S. Aronson, Dr. and Mrs. Robert B. Dearmin, Dr. and Mrs. John K. Leasure, Dr. and Mrs. C. H. McCaskey, Dr. and Mrs. Russell A. Sage, Dr. and Mrs. B. E. Ellis, Mrs. John Carmack, and her son, John Carmack.

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Dr. W. D. Gatch, dean of the Indiana University School of Medicine in Indianapolis, has been made a member of the advisory board in surgery for the Washington Institute of Medicine. The organization was established in 1930 for the purpose of acquainting medical men with the recent worthwhile advances in their profession through the compilation of literature pertaining to the specialties and to general medicine. The work is done through the facilities of the Surgeon-General's library in Washington, D. C.

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The 1936 alumni reunion of the Central College of Physicians and Surgeons was held October fourteenth in the Columbia Club, Indianapolis. Speakers included Dr. E. E. Padgett and Dr. John F. Barnhill, of Indianapolis; Dr. William H. Larabee, of New Palestine; Dr. Simon P. Scherer, of Martinsville, and Dr. Roy Burlington, of Attica. Dr. Goethe Link presided at the meeting, and Dr. Frank F. Hutchins was toastmaster. Officers for 1937 were elected as follows: Dr. Roy Burlington, Attica, president; Dr. A. E. Stinson, Rochester, first vice-president; Dr. H. S. Mackey, Indianapolis, second vice-president, and Dr. Lillian Lowder, of Indianapolis, secretary-treasurer.

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In addition to the articles already enumerated, the following have been accepted by the Council on Pharmacy and Chemistry of the American Medical Association:

International Vitamin Corp.

I. V. C. Halibut Liver Oil, Plain

Capsules I. V. C. Halibut Liver Oil, Plain, 3 minimis

I. V. C. Halibut Liver Oil Fortified with Natural Vitamin D

Capsules I. V. C. Halibut Liver Oil with Vitamin D Concentrate in Neutral Oil, 3 minimis.

Lederle Laboratories, Inc.

Pollen Antigen-Lederle, Mixed Grasses

Concentrated Pollen Antigen-Lederle, Mixed Grasses

Scarlet Fever Streptococcus Immunizing Toxin-Lederle, one 2 c.c. vial containing 80,000 to 100,000 skin test doses.

United States Standard Products Co.

Ampuls Solution Caffeine Sodio-Benzoate 7½ grains, 2 c.c.

The following products have been accepted for inclusion in the List of Articles and Brands Accepted by the Council But Not Described in N. N. R. (New and Nonofficial Remedies, 1936, p. 471):  
Lederle Laboratories

Glycerinated Allergenic Extracts (Diagnostic)—Lederle  
(Bee, House Fly, Mosquito and Sand Fly).

**THE INDIANA STATE CONFERENCE ON SOCIAL WORK**

The forty-fifth annual session of the Indiana State Conference on Social Work will be held in Indianapolis November 29 to December 1. Joseph A. Andrew, Lafayette, a member of the House of Representatives, is president; Wayne Coy, Administrator of the State Department of Public Welfare, is secretary.

The conference will open Sunday afternoon with addresses by Governor McNutt and by Frank Bane, director of the Social Security Board. They will discuss the social security program in action, in Indiana and other states. At the evening session the speakers will be Prof. Harrison A. Dobbs, a member of the faculty of the School of Social Service Administration, University of Chicago, and G. Lyle Belsley, also of Chicago and director of the Civil Service Assembly of the United States and Canada. The two speakers will emphasize the importance of training, Prof. Dobbs for professional social work, Mr. Belsley for the general public service, which he says can be more effectively carried forward by people who are permitted to perform their tasks within the framework of a sound personnel system.

Monday morning will be devoted to less formal round tables and section meetings in charge of the seven divisions, namely, Children, Community Organization, County Charities, Delinquency and Correction, the Family, Health, and Group Work. Each division arranges its own program.

All the divisions will have equally interesting programs Tuesday morning. The new state child welfare program, types of community response to unemployment, new developments of direct interest to county poor asylum managers, the prevention of delinquency, tuberculosis as a social problem—these and other topics will receive attention in round tables conducted by the several divisions. Monday afternoon is left open for the meetings of a number of state-wide organizations affiliated with the conference.

One of the most valuable features of the conference is the study courses, which will begin Saturday morning, November 28. They are not a substitute for professional training, but they do meet a professional need which no other service can provide. Timely subjects developed by practical experts provide an opportunity for the integration of individual experience with the best thought of others. The intimacy of the seminars is an educational experience complementary to the broad scope and inspiration of the conference. Everything known of professional method or adult education gives assurance of the value of these courses. There are to be eight study courses this year. With necessary restrictions as to the number of students, they are open to all members of the conference by the payment of a fee of \$2 in addition to the regular membership dues of \$1. The courses and their leaders are:

*Social Welfare Planning*, by Dr. Arthur Dunham,

Professor of Community Organization, University of Michigan, Ann Arbor.

*Problems of the Adolescent*, by Oscar B. Markey, M.D., Associate in Psychiatry, Mount Sinai Hospital, Cleveland, Ohio.

*Behavior Problems in Younger Children*, by Alberta Jones, M.D., Indianapolis, psychiatric consultant to the Family Welfare Society, Children's Bureau of the Indianapolis Orphan Asylum, and the Social Service Department of the Public Schools.

*Group Work Objectives and Methods*, by Dr. Grace Coyle, Assistant Professor of Group Work, School of Applied Social Sciences, Western Reserve University, Cleveland.

*Social Welfare Planning in Rural Communities*, by Wilma vanDusseldorf, Technical Advisor, Division of Technical Training, Social Security Board, Washington, D. C.

*Fundamentals of Social Case Work*, by Mrs. Ella Weinurther Reed, American Public Welfare Association Representative, Consultant for Public Welfare Placement, Chicago.

*Case Work Treatment*, by Florence Hollis, Assistant Professor of Family Case Work, School of Applied Social Sciences, Western Reserve University, Cleveland.

*Dependent Children*, by Ethel Verry, Executive Secretary, Chicago Orphan Asylum, Chicago.

## INDIANA UNIVERSITY NEWS NOTES

Dr. T. E. Broadie, graduate of the class of 1928 from the Indiana University School of Medicine, has been named superintendent of the Ancker Hospital, St. Paul, Minn. Following his graduation from the I. U. medical school, Dr. Broadie was interne at the Aucker Hospital for the year 1929. The following two years he was resident physician of the hospital and in 1932 was named assistant superintendent. He held this position until his new appointment this fall. Dr. Broadie is from Williamsport, Ind.

President William Lowe Bryan of Indiana University spoke to seniors of the Indiana University School of Medicine September 25, on "My Reminiscence in French and German Universities."

At the October meeting of the Indiana University Board of Trustees, the following resolutions were passed on Dr. William N. Wishard for his long service to the Indiana University School of Medicine:

"The trustees of Indiana University desire to make an official record of their appreciation of the life and services of Dr. William N. Wishard.

In official publications of the university there will be set forth the main features of his life as physician and surgeon, as teacher, as executive committee member of the university school of medicine, as nationally recognized scientist and leader in the field of medicine and surgery.

"The trustees single out for special remembrance the service rendered the university by Dr. Wishard when he first became a member of the faculty of the school of medicine. In spite of the great complexities of the situation and the limited means with which to meet them, Dr. Wishard, as chairman of the executive committee of the faculty, guided the school of medicine through several critical years with unexcelled devotion and success.

"In the later years he has cooperated heartily with the succeeding deans, Emerson and Gatch, always keeping in view the high goal of medical education to which he has given so much of his life.

"The university has had pride in the bestowing upon Dr. Wishard its highest academic honor, the degree, doctor of laws. The trustees wish for Dr. Wishard many years of life and health and happiness."

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Charles D. Johnson, of Indianapolis, and Ray J. Getz, of Fort Wayne, have been pledged to the Theta Kappa Psi, professional medical fraternity at Indiana University. At the opening meeting of this fraternity at the I. U. school of medicine at Bloomington, the following resident physicians of the university's medical center in Indianapolis spoke: Dr. Donald Close, Dr. Howard Stellman and Dr. Robert Hill.

Medical students from the Indianapolis division of the I. U. school of medicine who attended the meeting were: Ogden D. Pinkerton, O. R. Wilson, James Topolgs, Kenneth Sheek, Asa H. Fender, Lester Reed, Harold Spees, Donald Ledig, Lloyd Goad, Edwin Wunderlick, Ward Bloom, Franklin Rudolf and Fielding Williams. Joseph W. Freeman, head of the Bloomington chapter of the fraternity, presided at the meeting.

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Louis E. Evans, associate professor of sociology in the Indiana University training course for social work at Indianapolis, was in New York the early part of October where he advised the committees of the Welfare Council of New York and the Federation of Protestant Agencies on the care of Negro children in New York City. Professor Evans was asked by these organizations to make the trip to New York City. The middle of October, Mr. Evans went to Bloomington, Illinois, to give a series of four lectures on child welfare to Illinois social workers as part of a study course in connection with the Illinois Conference on Social Welfare to be held in Bloomington. Mr. Evans teaches courses in Advanced Child Welfare and Advanced Public Welfare Administration in the social work course in Indianapolis.

## SOCIETIES — INSTITUTIONS

### INDIANA STATE MEDICAL ASSOCIATION

#### THE COUNCIL

##### *First Meeting*

(South Bend Session, October 6, 1936)

The Council of the Indiana State Medical Association convened in the Blue Room of the Oliver Hotel, South Bend, Indiana, at 2:00 p. m., Tuesday, October 6, 1936. The meeting was called to order by Dr. O. O. Alexander, of Terre Haute, chairman of the Council. Roll call showed the following present:

##### *Councilors*

- 1st District—Not represented.
- 2nd District—H. C. Wadsworth, Washington.
- 3rd District—H. C. Ragsdale, Bedford.
- 4th District—Not represented.
- 5th District—O. O. Alexander, Terre Haute.
- 6th District—Samuel Kennedy, Shelbyville.
- 7th District—Not represented.
- 8th District—M. A. Austin, Anderson.
- 9th District—F. T. Romberger, Lafayette.
- 10th District—N. K. Forster, Hammond.
- 11th District—Ira Perry, North Manchester.
- 12th District—E. M. Van Buskirk, Fort Wayne.
- 13th District—W. B. Christophel, Mishawaka.

##### *Officers*

R. L. Sensenich, South Bend, president.

##### *Executive Committee*

C. A. Nafe, Indianapolis, chairman.

H. H. Wheeler, Indianapolis.

T. A. Hendricks, Indianapolis, executive secretary.

Upon the motion of Dr. Van Buskirk, seconded by Dr. Wadsworth, the reading of the minutes of the midwinter meeting of the Council, which was held in Indiana on January 12, 1936, was dispensed with as these minutes were printed in the February, 1936, issue of THE JOURNAL.

The annual councilor reports were accepted as printed in the September, 1936, JOURNAL.

Dr. Christophel, upon behalf of the members of the thirteenth district, expressed the pleasure of the district in having the annual session of the State Association held in South Bend.

Dr. Austin spoke of the difficulty in arranging for a district meeting in the eighth district due to the fact that so many other medical meetings are scheduled. The suggestion was offered that the district hold a meeting in conjunction with one of the county societies merely to elect officers and maintain the organization of the eighth district. Another suggestion was to the effect that an organization meeting be held some Sunday evening, making it a social rather than a scientific meeting. Following further discussion, Dr. Forster moved that the Council go on record to the effect that it expected each councilor to see that there be held in his district at least one district meeting each year for the purpose of maintaining an organization and not for purposes of scientific meetings especially. This motion was seconded by Dr. Christophel and carried.

The secretary again called attention to the fact that two district meetings were held on the same day this year and he asked that efforts be made to avoid these conflicts in dates when arranging for district meetings.

##### *Unfinished Business*

The secretary read a letter from Dr. William R. Davidson, secretary of the Indiana State Board of Medical Registration and Examination, in which he spoke as follows regarding the revision of the medical law:

"I believe that a revision would be advisable, but I cannot feel that this is the proper time to bring the matter up. Conditions are such that the time of the Legislature will be fully occupied by questions of more vital interest. Then, too, the attention of the various cults of course would not be favor-

able, and that would cause considerable trouble at the present time, for various reasons, which I told you. I believe that in a year or two the time will be more opportune to consider a revision.

"In the meantime, a committee of the Association might well be appointed to go through this. I have in mind the necessary changes, and they are not many, because I feel that I know more about the administration than a committee of either the Association or the Legislature, because I have learned its weaknesses in attempting to execute the law."

#### New Business

1. The following letter from Dr. Davidson, addressed to a physician in southern Indiana, was read:

"Mr. Hendricks has forwarded me your letter and I have asked the clerk to check on this man.

"I notice that he is removing tonsils and hemorrhoids, which is distinctly beyond the limits of his license. Would it be possible for you to obtain some good witnesses who will stand hitched, and turn these over to the prosecutor of your county, with the request that he should go after this man? If he should desire the assistance of the attorney general's office, I know he can obtain that cooperation.

"I have been trying to get a suit of this kind, as I believe that a victory would curb the increasing tendency of these drugless cult licentiates to invade the legitimate practice."

2. The secretary read a letter from Dr. I. C. Barclay, councilor of the first district, in which he said it would be impossible for him to attend the Council meetings at this time because of illness.

3. Report was made that letters indicating that they were favorable to the medical profession had been received from the candidates for governor and lieutenant-governor of both parties.

4. Upon the motion of Dr. Forster, seconded by Dr. Romberger, Dr. E. M. Shanklin was unanimously re-elected editor of THE JOURNAL for 1937. Dr. Austin made the motion that Dr. Thurman B. Rice be elected to succeed himself as a member of the editorial board to serve five years; motion seconded by Dr. Romberger, and carried. Dr. Rice's present term expires December 31, 1936.

5. Dr. Forster moved that the midwinter meeting of the Council be held on the third Sunday in January—January 17, 1937. This motion was seconded by Dr. Perry, and carried.

The Council adjourned until Thursday morning following the meeting of the House of Delegates.

#### THE COUNCIL—Second Meeting

(South Bend Session, October 8, 1936)

The second meeting of the Council was held at 10:00 a. m., Thursday, October 8, 1936, in the Blue Room of the Oliver Hotel, South Bend, immediately upon adjournment of the final meeting of the House of Delegates. The minutes of the previous meeting were not read.

Roll call showed the following members present:

#### Councilors

2nd District—H. C. Wadsworth, Washington  
4th District—M. C. McKain, Columbus  
5th District—O. O. Alexander, Terre Haute  
7th District—C. J. Clark, Indianapolis  
8th District—M. A. Austin, Anderson  
9th District—F. T. Romberger, Lafayette  
10th District—N. K. Forster, Hammond  
11th District—Ira Perry, North Manchester  
12th District—E. M. VanBuskirk, Fort Wayne.  
13th District—W. B. Christophel, Mishawaka

#### Officers

R. L. Sensenich, South Bend, president  
E. D. Clark, Indianapolis, president-elect, 1936  
A. F. Weyerbacher, Indianapolis, treasurer  
Herman M. Baker, Evansville, president-elect, 1937  
T. A. Hendricks, executive secretary

The report of the Auditing Committee which had been referred to the Council was approved.

There being no further business, the Council was adjourned.

THOMAS A. HENDRICKS,  
Executive Secretary.

#### HOUSE OF DELEGATES

(South Bend Session, 1936)

#### First Meeting

The first meeting of the House of Delegates convened at four fifteen o'clock, Tuesday afternoon, October 6, 1936, in the main convention hall of the Jefferson Plaza, South Bend, the president, Dr. R. L. Sensenich of South Bend, presiding.

Dr. George R. Daniels moved that the signed attendance slips be accepted as the roll call. Motion seconded by Dr. B. G. Keeney and carried. These slips showed the following present:

<i>County</i>	<i>Delegates</i>
Allen	Maurice R. Lohman, Fort Wayne William C. Wright, Fort Wayne
Bartholomew	J. L. Wyatt, Fort Wayne
Boone	A. M. Kirkpatrick, Columbus
Cass	E. A. Rainey, Lebanon
Clinton	B. W. Egan, Logansport
Dearborn-Ohio	Charles B. Compton, Frankfort
Decatur	O. H. Stewart, Aurora
DeKalb	H. S. McKee, Greensburg
Delaware-Blackford	M. E. Klingler, Garrett
Elkhart	T. R. Owens, Muncie
Fayette-Franklin	A. C. Yoder, Goshen
Floyd	Ralph S. Sappenfield, Brookville
Fulton	C. E. Briscoe, New Albany
Gibson	A. E. Stinson, Rochester
Hancock	B. C. Gwaltney, Fort Branch
Harrison	Jesse E. Ferrell, Fortville
Hendricks	William E. Amy, Corydon
Henry	Carl B. Parker, Danville
Howard	Walter M. Stout, Newcastle
Huntington	H. M. Rhorer, Kokomo
Jackson	Myers Deems, Huntington
Jefferson	H. P. Graessle, Seymour
LaPorte	N. A. Kremer, Madison
Lawrence	Jon N. Kelly, LaPorte
Madison	W. H. McKnight, Bedford
Marion	C. V. Rozelle, Anderson
	E. O. Asher, New Augusta
Marshall	Max A. Bahr, Indianapolis
Montgomery	O. H. Bakemeier, Indianapolis
Morgan	Foster J. Hudson, Indianapolis
Noble	Henry S. Leonard, Indianapolis
Orange	Howard B. Mettel, Indianapolis
Owen	Herman G. Morgan, Indianapolis
Posey	R. H. Moser, Indianapolis
Randolph	O. W. Sicks, Indianapolis
St. Joseph	Roy Lee Smith, Indianapolis
	T. C. Eley, Plymouth
Scott	T. Z. Ball, Crawfordsville
Shelby	Charles L. Aker, Mooresville
Spencer	W. F. Carver, Albion
Steuben	C. E. Boyd, West Baden
Switzerland	Boaz Yocom, Coal City
Tippecanoe	Harold E. Rop, New Harmony
	O. E. Current, Farmland
Vanderburgh	P. J. Birmingham, South Bend
Vigo	A. S. Giordano, South Bend
	M. D. Wygant, Mishawaka
Wabash	M. L. McClain, Scottsburg
Washington	B. G. Keeney, Shelbyville
Wayne-Union	J. C. Glackman, Rockport
Whitley	G. N. Lake, Pleasant Lake
	M. F. Daubenhauer, Patriot
	Gordon A. Thomas, Lafayette
	Earl VanReed, Lafayette
	Herman M. Baker, Evansville
	R. G. Harkness, Terre Haute
	O. R. Spigler, Terre Haute
	Ira E. Perry, North Manchester
	Lawrence W. Paynter, Salem
	Will A. Thompson, Liberty
	Paul A. Garber, South Whitley

*Councilors*

2nd District	H. C. Wadsworth, Washington
3rd District	H. C. Ragsdale, Bedford
4th District	Maurice C. McKain, Columbus
5th District	O. O. Alexander, Terre Haute
7th District	C. J. Clark, Indianapolis
8th District	M. A. Austin, Anderson
9th District	Floyd T. Romberger, Lafayette
10th District	N. K. Forster, Hammond
12th District	E. M. VanBuskirk, Fort Wayne
13th District	W. B. Christophel, Mishawaka

*Past Presidents*

W. N. Wishard, Indianapolis
E. M. Shanklin, Hammond
Charles N. Combs, Terre Haute
George R. Daniels, Marion
C. E. Gillespie, Seymour
A. B. Graham, Indianapolis
F. S. Crockett, Lafayette
E. E. Padgett, Indianapolis

*Officers*

R. L. Sensenich, South Bend, president
Edmund D. Clark, Indianapolis, president-elect
A. F. Weyerbacher, Indianapolis, treasurer
T. A. Hendricks, Indianapolis, executive secretary
D. F. Cameron, Fort Wayne, delegate to the A. M. A.

Dr. W. F. Carver, chairman of the Credentials Committee, announced that a quorum was present, and the chairman, calling attention to Chapter IV, Section 3, of the By-Laws of the Association, which state that "twenty delegates shall constitute a quorum," declared the House of Delegates open and ready for business.

**THE CHAIRMAN:** Just for your information, in case of any contemplated change in them, I want to call to your attention the method of amending the Constitution and By-Laws. The By-Laws may be amended at any annual session by a majority vote of all delegates present at that session after the amendment has laid on the table for one day. The House of Delegates may amend any article of the Constitution by a two-thirds vote of all delegates present at any annual session provided that such amendment shall have been presented in open meeting at the previous annual session and that it shall have been published twice during the year in THE JOURNAL of the Association.

(At this point the House of Delegates stood in silence for a few moments in tribute to the memory of Dr. George W. McCaskey of Fort Wayne, president of the State Association in 1901, and Dr. J. M. Hicks of Huntington, delegate from Huntington county in 1935, both of whom had died since the last annual session.)

Next in order of business would be the reading of the minutes of the previous meetings. The chair will entertain a motion that these minutes be accepted as printed in THE JOURNAL of November, 1935. (Dr. Daniels moved that the reading of the minutes be dispensed with; motion seconded by Dr. F. T. Romberger, and carried.)

For several years past it has been the custom of the House by resolution to invite the attendance at these meetings of the delegates to the American Medical Association. There is no provision as the By-Laws and Constitution now exist for them to be regularly present at these meetings but I think you can see the necessity of their being present. The chair therefore will entertain a motion that an invitation be extended to the delegates to be present at this session.

**DR. GEORGE DANIELS:** I so move. (Motion seconded by Dr. A. M. Kirkpatrick, and carried.)

The chairman at this time, upon behalf of the members of the House, invited the secretaries of the county medical societies to sit in on this session of the House of Delegates.

**THE CHAIRMAN:** To refresh your mind in regard to reference committees, Chapter IX, Section 1, of the By-Laws states that reference committees shall be appointed by the president immediately after the organization of the House of Delegates,

these committees to serve during the session at which they are appointed. These reference committees should not be confused with the all-year round standing committees. To these committees shall be referred all reports, resolutions and measures presented to the House of Delegates at this session, except such matters as properly come before the Council, and the recommendations of these committees shall be submitted at the next meeting of the House of Delegates for acceptance in the original or modified form, or for rejection. The next meeting of the House of Delegates will be held Thursday morning, promptly at seven o'clock in the Rotary room, mezzanine floor of the Oliver Hotel. So we will proceed with the appointment of these committees. Each committee consists of five members, the first member named being the chairman of the committee. The president will make these appointments in the order they are named in the By-Laws. Will you please stand and remain standing until your committee is completed?

*Committee on Reports of Officers*

W. E. Christophel, Mishawaka, chairman (St. Joseph)
Foster J. Hudson, Indianapolis (Marion)
F. T. Romberger, Lafayette (Tippecanoe)
Ira Perry, North Manchester (Wabash)
A. C. Yoder, Goshen (Elkhart)

*Sections and Section Work*

N. K. Forster, Hammond, chairman (Lake)
William C. Wright, Fort Wayne (Allen)
C. B. Compton, Frankfort (Clinton)
R. S. Sappenstein, Brookville (Fayette-Franklin)
B. G. Keeney, Shelbyville (Shelby)

*Rules and Order of Business*

M. C. McKain, Columbus, chairman (Bartholomew)
M. E. Klingler, Garrett (DeKalb)
C. E. Briscoe, New Albany (Floyd)
J. C. Glackman, Rockport (Spencer)
W. H. McKnight, Bedford (Lawrence)

*Medical Education and Hospitals*

Max A. Bahr, Indianapolis, chairman (Marion)
M. D. Wygant, Mishawaka (St. Joseph)
M. R. Lohman, Fort Wayne (Allen)
Earl VanReed, Lafayette (Tippecanoe)
Jesse E. Ferrell, Fortville (Hancock)

*Public Policy and Legislation*

R. G. Harkness, Terre Haute, chairman (Vigo)
T. R. Owens, Muncie (Delaware-Blackford)
Walter M. Stout, Newcastle (Henry)
B. W. Egan, Logansport (Cass)
A. E. Stinson, Rochester (Fulton)

*Publicity*

H. G. Morgan, Indianapolis, chairman (Marion)
Herman M. Baker, Evansville (Vanderburgh)
E. A. Rainey, Lebanon (Boone)
J. L. Wyatt, Fort Wayne (Allen)
T. Z. Ball, Crawfordsville (Montgomery)

*Hygiene and Public Health*

H. S. Leonard, Indianapolis, chairman (Marion)
H. M. Rhorer, Kokomo (Howard)
C. E. Boyd, West Baden (Orange)
A. M. Kirkpatrick, Columbus (Bartholomew)
Carl B. Parker, Danville (Hendricks)

*Amendments to Constitution and By-Laws*

T. C. Eley, Plymouth, chairman (Marshall)
E. O. Asher, New Augusta (Marion)
H. P. Graessle, Seymour (Jackson)
W. F. Carver, Albion (Noble)
R. H. Moser, Indianapolis (Marion)

*Credentials*

J. N. Kelly, LaPorte, chairman (LaPorte)
W. E. Amy, Corydon (Harrison)
M. L. McClain, Scottsburg (Scott)
Myers Deems, Huntington (Huntington)
B. C. Gwaltney, Ft. Branch (Gibson)

*Miscellaneous Business*

P. J. Birmingham, South Bend, chairman (St. Joseph)
Paul Garber, South Whitley (Whitley)
O. W. Sicks, Indianapolis (Marion)

M. F. Daubenheyer, Patriot (Switzerland)

H. S. McKee, Greensburg (Decatur)

**THE CHAIRMAN:** Immediately at the conclusion of this session of the House we would appreciate it if the chairmen would come forward and arrange for meetings of their committees. If you will give us a note of the time your committee will meet we may be able to assist you by placing a notice on the bulletin board. It will be necessary that these committees meet and have their reports ready sometime Wednesday as you know the Thursday meeting is a breakfast meeting and you will have no time that morning to get your material ready. We will ask that you meet as soon as possible and give due consideration to the matters referred to you.

#### Reports of Officers

**THE CHAIRMAN:** The first in order of business are the reports of officers. These reports, except for the address from the chair and the reports of the president and the president-elect to the House of Delegates, are printed in the September issue of THE JOURNAL and also in the handbook of the House of Delegates but each officer and committee chairman will receive five minutes in which to make any additional report which he desires or to explain material in the report which already has been printed. So in the order in which the reports are printed in the handbook the chairman will be called upon to make any additions or explanations he may have to his report.

#### Report of the President

Dr. E. D. Clark, president-elect, took the chair while the president explained and amplified parts of his report, a mimeographed copy of which was handed to each member of the House of Delegates. (This report is printed on page 589 in this JOURNAL.) Referred to Reference Committee on Reports of Officers.

#### Address of the President-elect

**THE CHAIRMAN:** Next we will have the address of the president-elect, Dr. Edmund D. Clark, of Indianapolis:

Mr. Chairman and Gentlemen:

In speaking to you today I am affected by many and varying emotions. Not the least of these is a deep appreciation of the honor and responsibility bestowed upon me by your action in electing me president of this Association for the ensuing year. Constantly, since our last annual meeting, I have been very conscious not only of my desire to merit fully the honor given me, but also of my hope that, as your president, it may fall to me to be of genuine service to you and to the people of Indiana, who are not only our patients, but also our fellow citizens and friends with whom we enjoy the most confidential and personal relations, and who often look to us for guidance and counsel in many matters not strictly within our professional scope.

I promise you and myself that every act of mine, as president of your association, will be an attempt toward justifying and increasing public confidence in ourselves. In many respects, the day of the country doctor undoubtedly—and unfortunately—is over, but I tell you today that there is no more crying need, or more honorable goal than that of carrying on to the best of our ability and understanding in the true spirit of unselfishness and service which actuated the country doctor.

There are many things about which I would like to talk to you today. One of these concerns the avenues which much of our modern education and scholastic training has been taking for several years without adequate or forceful criticism and protest from the general run of American citizens and taxpayers. This in a broad sense has to do with the mental health of the American youth. To be quite specific at once, I say unreservedly that I am deeply worried and concerned by what I consider the subversive, immoral, and undermining doctrines which are permitted to be taught in our universities, state-supported and otherwise. I have been aware of this for some time, but it was only recently that I was informed by a university official that "nothing could be done about it"! Just imagine that! I hold that it is our business—mine, at least, as a citizen—to see that something is done about it!

What are some of these subversive and undermining doc-

trines that are breeding poison in our colleges, and why can nothing be done about them?

Frankly, the matters which are causing me the most concern, and which are tainting the minds and habits of our young people are the ramifications which the teaching of psychology, sociology, philosophy, ethics, and economics have been permitted to take. Under the guise and protection of "academic freedom," many professors in these subjects teach communism, socialism, anarchy, and government-regulated social security as an innate right. I am informed that one instructor in one of our Indiana colleges openly advised members of his classes to "be themselves" in matters of sex relations. "Marriage," he is reported as having said, "perhaps is a necessary and old-fashioned social institution, but not a requisite when 'love' asserts itself!"

Of course, I have no intention, or desire, to emphasize unduly what may have been the inept wanderings of a distorted professorial mind. We can be deeply grateful, at least, that the number of distorted minds on college and university faculties is small, but there can be no question of the unsavory and destructive teachings which are all about us, not only in what were once considered our seats of learning, but also in many other avenues of life. Virtually all of the sterling tenets of decent living, love, religion, romance, honesty, and citizenship are being attacked and undermined almost constantly.

Are we going to continue to permit destructive forces to operate in the schools and colleges to which we entrust our children? I use the word "children" advisedly, because that is just what most of our sons and daughters are when they enter college and some of them are still children, to all intents and purposes, when they graduate.

In commenting on these matters from a "higher education" standpoint, the *Saturday Evening Post* a few years ago very well explained the situation in these words: "Professors are not a sacrosanct class. They have their weaklings, misfits, ignoramuses, and irresponsibles. Not all school teachers, or even professors, are persons of superlative ability, special fitness, or even devotion. \* \* \* The undesirable professor does not embezzle or misappropriate trust funds; he makes a silly ass of himself. He does not run away with a client's money; he lets a fool idea run away with him. \* \* \* There is a type of professor who attempts to be as silly, sensational and shocking, as possible." I am sure that you will all agree that we have had plenty of evidence of the truth of this comment.

It is evident to me, therefore, that in many respects "education" has run wild in this country. I was taught, as were most of you, that education was intended to fit us to become useful members of society. I am sure that fundamentally education still means the same thing; but many of the channels and avenues which it has taken have been those which lead to personal irresponsibility, neurosis, spinelessness, feeding at the public trough, varying degrees of immorality, disrespect for time-honored institutions and patriotism, not to mention the open and avowed trend toward communism, socialism, pacifism, and spoliation.

An able and far-sighted statement on this subject was made a few days ago by Paul C. Stetson, superintendent of the Indianapolis public schools, on the occasion of his addressing the school teachers of that city. He said, in part:

"Many of our prominent educational leaders express great impatience with our social pattern and profess belief that the schools should lead in a movement to remake the social order. From this view we dissent. Training in literacy, in physical well-being, in proper manners, in rigid ethical standards, and in ability to make intelligent choices are the primary functions of the public schools; it is not the function of the schools to lead a social movement to remake the world."

"Teachers should not take advantage of their positions and the immaturity of the students in their charge and attempt to influence the minds of their pupils in social and political matters in directions contrary to tried and proved ideals upon which this nation was founded. The determination of what social changes are necessary, essential and desirable is not the function of teachers as such. Such a decision is to

be arrived at only after a long study by scientifically and socially trained people.

"We believe that with all its faults our form of government is the best which has been devised, that although it is constantly changing, the changes are so gradual that there is always a large group of ideals which are permanent and worth-while for all.

"We feel that we have reached our present standard of intellectual, cultural and economic life after a slow and laborious upward climb and that we will continue to advance permanently only in the same way. Certainly we would not be a party to any movement which has for its purpose making our students cynical of our present mode of government and type of society."

Now, if some types of education have run wild in this country, study of the matter develops that there is nothing really new in the phenomena or in the basic desires of the destroyers. The facts are that the boring-in process has been going on for years, while we have sat back in smug complacency and let them get away with it. The year 1776 saw the birth of the United States of America. The same year also saw the birth, in Bavaria, of the "Illuminates," a slimy organization from which later sprang Marxism and communism. The six points of the "Illuminates" were:

Abolition of all ordered governments.

Abolition of private property.

Abolition of inheritance.

Abolition of patriotism.

Abolition of family.

Abolition of all religion.

The code of the "Illuminates" further reads:

"It is also necessary to gain the common people to our order. The great means to that end is influence in the schools. We must acquire the direction of education, of church management, of the professorial chair and the pulpit."

The record in these matters could be cited and quoted for hours, and many of you are perhaps more familiar than myself with what has been—and is—going on. I will, however, call your further attention to a passage used by Edwin Marshall Hadley in his book, "Sinister Shadows":

"Perhaps few of us sense the extent to which sound social, moral and economic beliefs are being undermined in many American institutions of higher learning by destructive influences. These come in part from communistic propaganda among students; in part from sensational literature and objectionable films; but also—and most effectively—from teachings of radical and 'modernistic' professors in the field of economics, philosophy, psychology, and ethics."

This country is spending hundreds of millions of dollars each year for education. We are paying and working for culture, loyalty, patriotism and respect for these institutions which have made the United States the envy of the rest of the world. But, my friends, what, in far too many instances, are we getting for our efforts, and our money? Instead of genuine culture, do we not often get the manners of the gutter? Instead of our being able to inculcate loyalty to and respect for our country, its Constitution, and its institutions, are you not aware that our young people are being inoculated with the poisonous doctrines of Internationalism and other Red propaganda aimed at nullifying our Constitution and the final overthrow of our form of government?

Why do we continue to permit these poisons to spread? I have stated that my university-official friend says that there is nothing his school can do about it, because he fears a "black-listing" by the American Association of University Professors, should he fire and kick off the campus a member of the faculty who has gone too far in his "academic freedom" complex. The American Association of University Professors was created for the lofty and laudable purpose of "facilitating a more effective co-operation between teachers and investigators in universities and colleges \* \* \* for the promotion of the interests of higher education and research, and in general to increase the usefulness and advance the standards and ideals of the profession."

In my college and university days, I studied under many worthy professors. I owe much to many of them, as I am

sure most of you do. I am sure also that only a small percentage of the men and women teaching in colleges and universities today can be charged with subversive, undermining and destructive teachings and acts, in defiance of their profession's high code of ethics and of their duty to society. On the other hand, I am equally positive that the few teachers who have—and are—infesting the minds of our young people should at once be dismissed, fired, thrown out, or otherwise effectually and permanently disposed of.

Were I a school head, I should welcome, as an award of patriotism and devotion to duty, any "blacklisting" which might come to my institution as the result of my kicking out a member of the faculty who, through his crack-brained misconception of his job, sought to undermine the very principles and ideals upon which our hopes and efforts have been based.

No other country has taken "education" as much to heart as we have. But have we taken sufficiently to heart the spirit and goal of education? Many men who have achieved riches have followed the practice of endowing some branch of education, without the least thought, I regret to state, of what was actually going on in the institutions which received their money. They were paying out money for insurance, but in many cases the money was used to start a conflagration!

I hold that the least we can do as citizens, parents, and physicians, is to urge those who are officials and trustees of educational institutions, or who have children attending high schools or colleges, to do their utmost to see that a sound orthodox viewpoint on the subjects, fundamental to our heritage and our civilization, shall be presented by the strongest teaching talent obtainable, and that any educational institution that is unwilling to make this provision should be publicly labelled and advertised as destructive of character—and thereafter avoided by intelligent people as unfit to train our youth.

I conclude by saying that we are not only saps, but are criminally negligent, if we continue to be blind to the wrong kind of "academic freedom."

As a profession and as an organization we have gone through a critical period in the history of medicine, and today we find ourselves facing many complex problems. I want to express a word of gratitude for the outstanding service rendered by our president, R. L. Sensenich, who has shown unusual energy and ability in attacking these difficult problems and has helped the Indiana State Medical Association maintain its position among the leading component state organizations of the American Medical Association.

Dr. Sensenich has asked me to outline my program for 1937. In general my policy will be to continue along present lines as long as we have an aggressive, wide-awake, fearless organization, and as long as we are getting results. I surely will follow the traditional course as set out by my immediate predecessors, Doctors Graham, Weinstein, Crockett, Padgett, Leach, and Sensenich.

As your president-elect, I here give you my pledge to follow during my tenure of office to the best of my ability the policies and program of activities as outlined by the House of Delegates and the Council of the Indiana State Medical Association.

(Referred to Reference Committee on Reports of Officers.)

#### Report of the Executive Secretary

MR. T. A. HENDRICKS: The report of the executive secretary appears upon pages 7 to 13 of the handbook of the House of Delegates. It is not necessary to read this report; I only wish to give you a few figures contained in it in order to emphasize those figures. This is a comparative review of the Association from 1926 to 1936. You will see that while the total membership was 2,571 for 1926, we may well anticipate a total membership this year of 2,900. The succeeding pages need no amplification perhaps, but a rather significant fact is found upon page 10 in reference to THE JOURNAL of the State Medical Association: "During the year of 1925, 480 reading pages were printed in THE JOURNAL as compared to 704 reading pages printed in 1935."

As you know, an Indiana State Medical Association library has been started, "The State Association has made a notable

start in establishing its own library since THE JOURNAL has been published through the headquarters office in Indianapolis. In these four years a library of 234 new volumes has been built up. These books, which come to THE JOURNAL for review, become the property of the Association and are available for loans to all members of the Association."

One word in regard to the annual secretaries' conference which has become one of the most important features of the Association. "Some of the most important addresses on economic and social medicine by some of the outstanding national leaders and authorities on these subjects have been presented at these conferences."

In conclusion, "In making this casual review over a ten-year period we of course are faced with the one inevitable regret, the memory of those physicians who have died during the past decade. Many who now are gone were most influential and worked most unselfishly to build the Indiana State Medical Association to the position where it can face the future with confidence and hope."

Referred to Reference Committee on Reports of Officers.

#### **Report of the Treasurer**

Referred to Reference Committee on Reports of Officers.

#### **Report of Chairman of the Council**

Referred to Reference Committee on Reports of Officers.

#### **Reports of Standing and Special Committee**

##### *Committee on Credentials*

Referred to Reference Committee on Credentials.

##### *Executive Committee*

DR. C. A. NAFE: You will note that the report of the Executive Committee is found beginning on page 32. This report is rather exhaustive and I will not attempt to cover it in any detail. I presume that you all have already read it. There are several things, however, that we would like to touch on briefly at this time. One of the major problems of the committee has been the attempt to discourage the groups who have been attempting to organize hospital insurance and health plans for the care of the sick which the committee considered detrimental to the public and to the practice of medicine. You are familiar with these, the Economy plan, and the one to which I would like particularly to call your attention. An attempt was made by the Medical and Dental Business Bureau of Indianapolis to insinuate in a bulletin which all the doctors of the state I am told received, that the Indiana State Medical Association approved their plan. Now in the September issue of THE JOURNAL our contact with that bureau is entirely explained. We did ask Mr. McCracken to write for THE JOURNAL a description of the difference between hospital insurance and group hospitalization. He then asked us to approve an insurance plan. We wrote that we could not approve his plan. Next thing we received was a bulletin offering a hospitalization insurance plan. The Executive Committee feels that the State Association should not be connected in any way with such a plan. The Indianapolis Medical Society has handled this situation very well. The announcement of the Medical and Dental Business Bureau did give to the doctors of the state an erroneous impression that this was worked out with the cooperation of the State Medical Association, which was a misstatement of the facts.

Of the many other things in this report there are but two which the Executive Committee would like to refer to the House of Delegates for its consideration. The first thing is the recommendation at the last part of the report. "The Executive Committee recommends to the House of Delegates that the question of bonding county medical society secretaries be taken up and thoroughly discussed by the House of Delegates at the South Bend meeting." There are several reasons for that. First, it is only good business; second, we should attempt in some way to eliminate a situation that arises occasionally in the State Medical Association when a member of a local society has paid his dues and the secretary has failed to forward those dues to the State Association and, therefore, he is not entitled to medical defense.

One final suggestion is brought by a letter we just received yesterday, a letter relative to a resolution passed recently by

the Medical Library Association recommending the appropriation of adequate funds for the Army Medical Library and its *Index Catalogue*. This library, as you know, is the largest and most complete in the world. During the past three years the funds of that library have been curtailed and very few books have been bought. Any physician may borrow from this library books that are not available in his own library. Therefore, the Executive Committee recommends that the House of Delegates request the American Medical Association to memorialize Congress to restore these funds.

THE CHAIRMAN: The report of the Executive Committee is referred to the Reference Committee on Reports of Officers.

##### *Committee on Arrangements*

Referred to Reference Committee on Miscellaneous Business.

##### *Committee on Scientific Work*

Referred to Reference Committee on Sections and Section Work.

##### *Committee on Public Policy and Legislation*

Referred to Reference Committee on Public Policy and Legislation.

##### *Bureau of Publicity*

DR. W. N. WISHARD: I will not take your time to review the rather considerable amount of work the Bureau of Publicity has done within the last year. Especially I want to call your attention to page 53 of the handbook because I want to mention one great activity on the part of the Bureau. We have made a pilgrimage recently to the grave of Mrs. Jane Todd Crawford in Sullivan, Indiana, who, as you know, was the first person ever to be operated upon for ovarian tumor. Also we make a pilgrimage to Lafayette (I say "we" which includes the members of the pioneer memorial committees of the Woman's Auxiliary of the State Association) to visit Dr. John Lambert Richmond's grave. You know that Dr. Richmond did the first Caesarean section west of the Alleghany mountains in what was then the United States of America. You know that Dr. John Stough Bobbs, of Indianapolis, put Indiana permanently on the surgical map of the world by doing the first operation for gallstones, and his patient, Mrs. Mary Burnworth, lived for many years afterwards. I think you know that story. I want to emphasize that, however, as a great deal of the work of the Bureau of Publicity relates to historical affairs. Dr. Zerfas has been contributing monthly articles which will form a basis for a volume on medical history in Indiana. I think I am not out of place in calling attention to the fact that these four people whom we have mentioned are not the only ones whom we should keep in memory and give some historical recognition to. I passed some twenty monuments today. The group of monuments to which I refer—those that I observed coming up here today—were erected by the vision of Dr. John N. Hurty, a former member of this society—one I think who should be remembered in the development of any historical record recognizing whatever worthwhile things have been done by members of the Indiana State Medical Association. The monuments I refer to are modern, sanitary schoolhouses erected through a law he wrote, and persuaded the legislature to enact. He wrote twenty-two or twenty-three of our sanitary laws in Indiana, or amendments to them, and he absolutely revolutionized the sanitary conditions of Indiana. We do well to remember the great things that he did for us and we do well to remember the great things that he and other persons we are trying to commemorate have done for us.

Referred to Reference Committee on Publicity.

##### *Committee on Civic and Industrial Relations*

Referred to Reference Committee on Public Policy and Legislation.

##### *Committee on Medical Education and Hospitals*

Referred to Reference Committee on Medical Education and Hospitals.

##### *Public Relations Committee*

Referred to Reference Committee on Public Policy and Legislation.

##### *JOURNAL Publication Committee*

Referred to Reference Committee on Reports of Officers.

*Committee on Necrology*

Referred to Reference Committee on Miscellaneous Business.

*Committee on Graduate Education*

Referred to Reference Committee on Medical Education and Hospitals.

*Committee on Diphtheria Prevention*

Referred to Reference Committee on Hygiene and Public Health.

*Committee on Study of Health Insurance*

Referred to Reference Committee on Public Policy and Legislation.

*Committee on Veterans' Affairs*

Referred to Reference Committee on Public Policy and Legislation.

*Committee on Study of High School Athletics*

Referred to Reference Committee on Hygiene and Public Health.

*Township Trustees Liaison Committee*

DR. F. S. CROCKETT: I would call the attention of the reference committee especially to our request that the committee be discontinued.

Referred to Reference Committee on Public Policy and Legislation.

*Committee on Lye Burns in Children*

THE CHAIRMAN: The chairman of this committee was ill and no report was submitted. There being no report, there is none to refer.

*Committee for the Study of Puerperal Mortality*

Referred to Reference Committee on Hygiene and Public Health.

*Committee on State Fair*

Referred to Reference Committee on Publicity.

*Committee on Mental Health*

Referred to Reference Committee on Hygiene and Public Health.

*Committee on Expert Testimony*

DR. MAX BAHE: I merely want to explain one of the resolutions that this committee has made and that is that the committee be discontinued. We have accumulated a tremendous amount of material. No state has any uniformity of opinion on this subject. The matter was taken up with the A. M. A. and Dr. William C. Woodward wrote the following relative to the better regulation of expert testimony. This opinion has been endorsed by the House of Delegates of the A. M. A.:

"The matter of expert testimony continues to arouse interest, but the interest aroused ends in discussion. The difficulty in the adoption of corrective measures arises not only out of constitutional provisions but out of the fact that there seems to be no adequate evidence of the need for legislation. The lawyer does not have to introduce an incompetent or dishonest expert witness into any case or to deceive any judge with respect to the qualifications of the witness whom he proffers. The judge is not required to permit any person to testify as an expert witness until he, of his own knowledge, or through evidence offered by counsel, is satisfied that the proffered witness is an expert. When lawyers cease to proffer ignorant and dishonest witnesses as experts, and when judges cease to recognize as expert witnesses persons with whose qualifications as experts they are not fully satisfied, there will be no market for services of such witnesses. Until that time comes and it has been determined how much of our difficulties arise out of failures on the part of lawyers and judges to exercise the rights and to discharge the duties they now have and how much is due to the inadequacy of laws governing the situation, it will be difficult to draft corrective legislation."

Since this correspondence with Dr. Woodward, and since this report was drafted, I received another letter from him in which he forwarded us a report of the meeting at Kansas City. Dr. Woodward's letter reads:

"I have received your letter of July 1, relative to expert testimony.

"At the recent meeting of the American Medical As-

sociation, in Kansas City, nothing was done with reference to expert testimony. It may interest you to know, however, that the National Conference of Commissioners on Uniform State Laws is now engaged in a study of the situation, with a view to the drafting of a uniform state law if such action is deemed desirable.

"The Conference ordinarily studies such matters primarily through committees, but I am unable to name the personnel of the committee having this particular matter in charge. It may be, however, that you can impress your views on that committee and on the Conference, if you so desire, through some one or more of the Commissioners from Indiana. They are:

Earl G. De Fur, Muncie.

Leo M. Gardner, Circle Tower, Indianapolis.

Bernard C. Gavit, Indiana University Law School, Bloomington."

Therefore, Mr. Chairman, since it doesn't seem possible for us to get anywhere in this controversy until the A. M. A. endorses more definite action relative to the matter of expert testimony, it will be useless for us to attempt to draft anything definite relative to the question; therefore your committee recommends that this committee on expert testimony be discontinued until such time when an agreement between the national legal and medical professions can be undertaken and some mutual understanding be endorsed.

Referred to Reference Committee on Public Safety and Legislation.

THE CHAIRMAN: I think this only emphasizes the need of what I expressed a while ago that we have material available in the files of the Association so there will be ready reference upon this work on which the committee has worked for two years in the past.

*Committee on Prevention of Traffic Accidents*

Referred to Reference Committee on Hygiene and Public Health.

*State Division of Public Health Liaison Committee to Deal With Social Security Act*

DR. E. O. ASHER: This committee report is in THE JOURNAL and in the hand book. We wish to make one correction, a typographical error. The report reads, "We recommend a continuance of this Liaison Committee." It should be, "We recommend a continuance of a Liaison Committee."

Referred to Reference Committee on Public Policy and Legislation.

*Committee on Student Debates*

Referred to Reference Committee on Miscellaneous Business.

*Committee on Secretaries' Conference*

Referred to Reference Committee on Miscellaneous Business.

*Committee on Control of Cancer*

Referred to Reference Committee on Hygiene and Public Health.

*Auditing Committee*

Referred to the Council.

*Report of the Historian*

Referred to Reference Committee on Reports of Officers.

*Report of Delegates to the A. M. A.*

DR. F. S. CROCKETT: We have nothing to add to our report as it is printed in the June JOURNAL. It is worthy of commendation that the delegates have been very attentive to their duties at the meetings of the American Medical Association.

Referred to Reference Committee on Reports of Officers.

*Unfinished Business*

THE CHAIRMAN: First we have the matter of recodification of the Constitution and By-Laws. Dr. Gordon Thomas is chairman of the committee appointed by the president as ordered by the House at the 1935 session. Dr. Thomas will now give us this committee's report.

DR. G. A. THOMAS: Mr. President, Members of the House of Delegates:

Your committee on reconsideration of the codification of the Constitution and By-Laws reports as follows:

We commend the praiseworthy work of the previous committee on codification. We have studied their work, as published in the 1935 handbook, from all angles. We recommend

the adoption of this published copy, plus such actions of the House of Delegates in the 1934 and 1935 sessions, with the following exceptions or changes:

*Constitution:*

Article IX, Section 2. This amendment is disapproved and the old section should be allowed to stand. The section refers to the election of the officers, including the executive secretary. The committee believes that the selection of the executive secretary should remain in the hands of the Council, which, in effect, constitutes the Board of Trustees of the State Association.

Article IX, Section 3. The old section should be allowed to stand, as it is more clear and more positive than the amendment.

*Proposed Amendments to the By-Laws:*

Chapter II, Section 5. The old section as printed in the 1935 handbook should be reinstated instead of the changed section. This would restore the \$500 annually allowed by the State Association for the entertainment of members and guests at the annual session.

Chapter VI. Duties of Officers. Section 2. The section should read:

"The President-elect's term of office shall be for one year, at the completion of which he succeeds to the presidency. While President-elect he shall assist the President in the discharge of his duties. In the event of the President's death, resignation or removal, the President-elect shall succeed him in office."

This is for specific clarification.

Chapter VII, Section 12.—Council. We recommend that old section 12 which delegates to the Council the authority to employ an Executive Secretary be restored. "The Council shall employ an Executive Secretary who need not be a physician nor a member of the Indiana State Medical Association."

Your committee has studied and inquired into all phases of and reactions to these modifications and we are of the honest and matured opinion that the changes are for the best interests of our State Association and its individual members.

I move the adoption of these changes, both to the Constitution and to the By-Laws, and their subsequent publication and favorable action of this House of Delegates in accordance with established precedent.

O. R. SPIGLER,  
J. T. OLIPHANT.  
GORDON A. THOMAS.

THE CHAIRMAN: The By-Laws as recodified by the first committee appointed were ruled adopted at the 1934 session, but the Constitution had to lay over until the following year. At Gary the motion was made to the effect that the By-Laws had been amended and as amended were in effect. There were, however, changes which were apparently not acceptable to the House in the proposed amendments to the Constitution and the president was instructed to appoint a new committee and report at this meeting. Now this committee has reported. It will be necessary, if the By-Laws are to be amended in accordance with this report, to have a second in order that they be before the House in proper form and may be acted upon at the meeting Thursday morning; that is, the By-Laws; the Constitution will follow the procedure of laying over for a year. (Motion seconded by Dr. Boaz Yocom, and carried.)

THE CHAIRMAN: The report of the committee as it is before the House will be referred to the Reference Committee on Amendments to the Constitution and By-Laws. Is there any other business?

DR. CROCKETT: I am directed by the State Board of Medical Registration and Examination to present the following resolution:

"WHEREAS the Medical Practice Act limits the expenditures of the Board of Medical Registration and Examination to a sum not in excess of the fees collected from candidates for examination or reciprocity and whereas this sum over a period of years has been sufficient only for conducting the annual examination and maintenance of the office with no funds available for the enforcement of the law for the pro-

tection of the public and the maintenance of proper standards of medical practice;

"THEREFORE BE IT RESOLVED that the House of Delegates of the Indiana State Medical Association favor the enactment of a law requiring annual registration of all licentiates under the medical Practice Act and that the fee for such registration shall not exceed \$2.00. Further, that the registration fees so collected shall be used by the Board of Medical Registration and Examination for the maintenance of the proper legal standards of medical practice."

I move the adoption of this resolution. (Motion seconded by Dr. C. B. Compton.)

THE CHAIRMAN: This resolution will be referred to the Reference Committee on Public Policy and Legislation.

Upon the motion of Dr. C. J. Clark, duly seconded, the first meeting of the House of Delegates adjourned to Thursday morning, October 8, 1936, at seven o'clock.

**HOUSE OF DELEGATES — Second Meeting**

The second meeting of the House of Delegates, a breakfast meeting, was held in the Rotary Room of the Oliver Hotel on Thursday, October 8, 1936, with the president, Dr. R. L. Sensenich, in the chair. The meeting was called to order at 7:15 a. m.

Dr. W. F. Carver, chairman of the Credentials Committee, called the roll, which showed the following present:

<i>County</i>	<i>Delegates</i>
Allen	Maurice R. Lohman, Fort Wayne William C. Wright, Fort Wayne
	J. L. Wyatt, Fort Wayne
Bartholomew	A. M. Kirkpatrick, Columbus
Boone	E. A. Rainey, Lebanon
Cass	B. W. Egan, Logansport
Clinton	C. A. Robison, Frankfort
Daviess-Martin	S. L. McPherson, Washington
Dearborn-Ohio	O. H. Stewart, Aurora
Decatur	H. S. McKee, Greensburg
DeKalb	M. E. Klingler, Garrett
Delaware-Blackford	T. R. Owens, Muncie
Elkhart	A. C. Yoder, Goshen
Fayette-Franklin	Ralph S. Sappenfield, Brookville
Floyd	C. E. Briscoe, New Albany
Fulton	A. E. Stinson, Rochester
Gibson	B. C. Gwaltney, Fort Branch
Grant	L. H. Eshleman, Marion
Hamilton	Ray Shanks, Noblesville
Hancock	Jesse E. Ferrell, Fortville
Harrison	William E. Amy, Corydon
Hendricks	Carl B. Parker, Danville
Henry	Walter M. Stout, Newcastle
Howard	H. M. Rhorer, Kokomo
Jackson	H. P. Graessle, Seymour
Jay	John Lansford, Redkey
Jefferson	N. A. Kremer, Madison
Johnson	Frank P. Albertson, Trafalgar
Knox	R. G. Moore, Vincennes
Kosciusko	C. E. Thomas, Leesburg
Lake	T. W. Oberlin, Hammond
LaPorte	Jon N. Kelly, LaPorte
Lawrence	W. H. McKnight, Bedford
Madison	C. V. Rozelle, Anderson
Marion	E. O. Asher, New Augusta
	Max A. Bahr, Indianapolis
	O. H. Bakemeier, Indianapolis
	Foster J. Hudson, Indianapolis
	Henry S. Leonard, Indianapolis
	Howard B. Mettel, Indianapolis
	Herman G. Morgan, Indianapolis
	R. H. Moser, Indianapolis
	O. W. Sicks, Indianapolis
	Roy Lee Smith, Indianapolis
Marshall	T. C. Eley, Plymouth
Monroe	William C. Reed, Bloomington
Montgomery	T. Z. Ball, Crawfordsville
Morgan	Charles L. Aker, Mooresville
Noble	W. F. Carver, Albion
Orange	C. E. Boyd, West Baden

Posey	H. E. Ropp, New Harmony
Putnam	G. D. Rhea, Greencastle
St. Joseph	P. J. Birmingham, South Bend
	A. S. Giordano, South Bend
Scott	M. D. Wygant, Mishawaka
Shelby	M. L. McClain, Scottsburg
Sullivan	B. G. Keeney, Shelbyville
Tippecanoe	J. T. Oliphant, Farmersburg
Vanderburgh	Gordon A. Thomas, Lafayette
	Earl VanReed, Lafayette
	Minor Miller, Evansville
Vigo	P. E. Yunker, Evansville
	R. G. Harkness, Terre Haute
Wabash	O. R. Spigler, Terre Haute
Washington	Ira E. Perry, North Manchester
Wayne-Union	Lawrence W. Paynter, Salem
Wells	Will A. Thompson, Liberty
Whitley	H. D. Caylor, Bluffton
	Paul A. Garber, South Whitley

*Councilors*

2nd District	H. C. Wadsworth, Washington
4th District	Maurice C. McKain, Columbus
5th District	O. O. Alexander, Terre Haute
6th District	Samuel Kennedy, Shelbyville
7th District	C. J. Clark, Indianapolis
8th District	M. A. Austin, Anderson
9th District	Floyd T. Romberger, Lafayette
10th District	N. K. Forster, Hammond
12th District	E. M. VanBuskirk, Fort Wayne
13th District	W. B. Christophel, Mishawaka

*Past Presidents*

W. N. Wishard, Indianapolis
J. B. Berteling, South Bend
E. M. Shanklin, Hammond
Charles N. Combs, Terre Haute
F. W. Gregor, Indianapolis
G. R. Daniels, Marion
A. B. Graham, Indianapolis
F. S. Crockett, Lafayette
E. E. Padgett, Indianapolis

*Officers*

R. L. Sensenich, South Bend, president
Edmund D. Clark, Indianapolis, president-elect
A. F. Weyerbacher, Indianapolis, treasurer
T. A. Hendricks, executive secretary
D. F. Cameron, Fort Wayne, delegate to the A. M. A.

Following an intermission in which breakfast was served, the chairman asked for a report on the attendance.

Dr. Carver reported 69 delegates, 10 councilors, and 9 past presidents present.

THE CHAIRMAN: It is therefore evident that a quorum is present. The House may proceed with routine business. First in order of business is the election of officers. Nominations for the office of president-elect are now in order.

*Election of Officers**President-elect:*

Dr. Minor Miller nominated Dr. Herman M. Baker, of Evansville.

Dr. Samuel Kennedy nominated Dr. Walter C. McFadden, of Shelbyville.

Dr. Carl Parker nominated Dr. O. T. Seamahorn, of Pittsburg.

THE CHAIRMAN: Are there any other nominations? If there are no other nominations we will proceed with the ballot. According to the By-Laws if no nominee receives a majority on the first ballot, the ballot must be repeated, the one receiving the lowest number of votes being dropped after the first ballot.

The chairman appointed Dr. Will Thompson, Dr. J. W. Bowers, and Dr. W. E. Amy tellers.

On the second ballot Dr. Herman M. Baker was elected president-elect for 1937.

THE CHAIRMAN: The chair will therefore announce the

election of Dr. Herman M. Baker, of Evansville, and appoint Dr. Minor Miller, Dr. Cy Clark and whomever the delegation from Vanderburgh County may select to escort the president-elect to this table.

*Treasurer:*

Dr. A. S. Giordano nominated Dr. A. F. Weyerbacher to succeed himself. Moved by Dr. F. T. Romberger, seconded by Dr. Herman Morgan, and carried that the nominations be closed and that the secretary cast the unanimous vote of the House for Dr. Weyerbacher for treasurer of the Indiana State Medical Association. Ballot cast by the executive secretary.

*Delegates to the American Medical Association*

THE CHAIRMAN: The next in order of business is the election of a delegate to the American Medical Association to succeed Dr. Homer G. Hamer, of Indianapolis, whose term will expire December 31, 1936. The American Medical Association determines the number of delegates we shall have and their term of office and also what qualifications are required. The Constitution and By-Laws of the American Medical Association state that a man to be qualified to be a delegate must have been a fellow in the A. M. A. for the preceding two years.

We will now permit the president-elect to say something: Dr. Baker.

DR. HERMAN M. BAKER: Moments like this are usually accompanied by a good bit of emotion; one doesn't speak very well under emotional stress. I look back on my years as county secretary and county president, president of the local academy and secretary and chairman of the medical section, and twelve years as a member of this House, and I certainly am not unmindful of the honor that has come to me this morning. I certainly am not forgetful of the responsibility that that honor carries with it, and all I can say at the moment is that I shall do the very best that I can to maintain the high standards and the fine traditions that have been laid down by a distinguished line of predecessors in this office.

THE CHAIRMAN: The chair will now entertain nominations for delegate to the American Medical Association to succeed Dr. Hamer.

Dr. F. W. Gregor nominated Dr. Hamer to succeed himself: nomination seconded by Dr. A. S. Giordano and carried. Dr. George Daniels moved that the nominations be closed; seconded by Dr. O. H. Bakemeier and carried. The executive secretary cast the unanimous vote of the House for Dr. Hamer as delegate to the American Medical Association to succeed himself for the ensuing two years.

With Dr. Clark, president-elect in the chair, nominations for delegate to the American Medical Association to succeed Dr. R. L. Sensenich were called for.

Dr. Giordano nominated Dr. Sensenich to succeed himself; nomination seconded by Dr. C. V. Rozelle and carried. Dr. Daniels moved that the nominations be closed; seconded by Dr. W. F. Carver and carried. The secretary cast the unanimous vote of the House for Dr. Sensenich as delegate to the American Medical Association to succeed himself for the ensuing two years.

*Alternate Delegates to the American Medical Association:*

THE CHAIRMAN: Nominations are in order for an alternate to Dr. Hamer to succeed Dr. W. F. Kelly of Indianapolis.

Dr. H. S. Leonard nominated Dr. Kelly to succeed himself in this position. Dr. C. J. Clark moved that the nominations be closed; seconded by Dr. J. E. Ferrell, and carried. The secretary cast the unanimous vote of the House for Dr. Kelly as alternate delegate to the American Medical Association for the ensuing two years.

THE CHAIRMAN: The chair will now receive nominations for alternate delegate to the American Medical Association to succeed Dr. E. M. Shanklin, alternate to Dr. Sensenich.

Dr. N. K. Forster nominated Dr. Shanklin to succeed himself. Dr. F. T. Romberger moved that the nominations be closed; seconded by Dr. C. J. Clark, and carried. The unanimous vote of the House for Dr. Shanklin for alternate delegate to the American Medical Association for the ensuing two years was cast by the executive secretary.

**Selection of City for 1937 Meeting**

Dr. C. E. Boyd, delegate from Orange county, extended an invitation to the Association to meet in French Lick in 1937. Dr. Giordano raised the question as to whether or not sufficient space for scientific exhibits is available in the French Lick Springs Hotel. Dr. Boyd assured the House that the mezzanine floor of the hotel would amply take care of this exhibit. Dr. Boyd also mentioned the fact that the hotel management would be able to take care of this convention only during the first ten days of October, 1937.

On motion of Dr. Daniels, seconded by Dr. Ferrell, and carried, the invitation to meet in French Lick in 1937 was accepted by the House.

**Election of Councilors:**

**THE CHAIRMAN:** Next in order of business is the election of councilors for the following districts: second, fifth, eighth, and eleventh. Some of these elections may already have been held but they should be reported to the House of Delegates at this session for confirmation.

Reports were made to the House of Delegates as follows regarding electing of councilors for these districts for the coming three years:

Second District—to succeed H. C. Wadsworth, Washington. Dr. S. L. McPherson reported that Dr. Wadsworth had been re-elected councilor of the second district. Dr. Gregor moved that the House confirm this election; motion seconded by Dr. J. T. Oliphant, and carried.

Fifth District—to succeed O. O. Alexander, Terre Haute. Dr. O. R. Spigler reported that the meeting at which the councilor of the fifth district would be elected for the ensuing three years had not yet been held.

Eighth District—to succeed M. A. Austin, Anderson. Dr. C. V. Rozelle reported that a meeting would be held on November 16, at which time a councilor would be elected.

Eleventh District—to succeed Ira Perry, North Manchester. Dr. Daniels reported that Dr. Perry would be re-elected at the fall meeting of the district. On Dr. Daniels' motion, seconded unanimously, the House confirmed Dr. Perry's re-election, subject to the action of the district society.

**Reports of Reference Committee***Reports of Officers**House of Delegates,**Indiana State Medical Association:*

Gentlemen:

The committee to which were referred the reports of officers has studied these reports carefully and views them with commendation.

The President's report and subsequent address both show a masterful grasp of the problems of the Indiana State Medical Association. We call particular attention to Dr. Senenich's outline for periodic health examinations, his espousal of the courses in postgraduate education, and to his plea for the securing of a more intense interest on the part of the younger men in our organization. These efforts of our State Association should and must be continued.

The address of the President-elect is a bountiful proof of his knowledge of the basic principles which should be our guide-posts for the future activities of the State Association. We can be happy in his leadership, and we should rest assured of his sound judgment in the year 1937.

The reports of the Chairman of the Council, the Executive Committee, the Executive Secretary, the Historian, the Treasurer, the JOURNAL Editor and the JOURNAL Publication Committee, and that of the A. M. A. delegates, all speak most highly of the remarkable, efficient and praiseworthy work being done by the respective members of our organization.

With reference to the matter concerning current deficiencies in the Army Medical Library, the committee recommends that the Indiana State Medical Association urge upon Congress, through appropriate channels, that Congress make available the necessary funds to bring and maintain the Army Medical Library up to date.

I move the adoption of this report.

W. B. CHRISTOPHEL, Chairman,

FLOYD T. ROMBERGER,  
A. C. YODER,

IRA PERRY,  
FOSTER J. HUDSON.

Dr. Christophel's motion for adoption of this report was seconded by Dr. Leonard and carried.

*• Sections and Section Work**House of Delegates,  
Indiana State Medical Association.*

Gentlemen:

Your committee having no specific report from the Committee on Scientific Work available, is guided in its recommendations by the character of the program presented at this session. It is our feeling that the present method of presenting general sessions followed by sectional meetings is greatly preferred by the majority of the members and should be continued. The policy of securing nationally known speakers for the general meetings and largely limiting the special sessions to our own state members has met with universal approval. The increased interest in the scientific exhibits is noteworthy, and it is to be hoped that this manifest interest will result in greater and more varied displays at future meetings.

While not desiring to invade the province of the Reference Committee on the Reports of Officers, we heartily indorse the suggestion of President Senenich relative to increasing efforts toward the building up of our scientific exhibits, and recommend for your approval any suitable means by which encouragement may be lent to the recognition of meritorious investigative work and presentations.

Your committee wishes to express its entire approval of the harmonious manner in which the sections appear to be functioning, and to compliment the Committee on Scientific Work and the section officers for the truly remarkable program which they have assembled for us.

No specific recommendations or changes of policy having been offered, none are presented and I move your approval of this report.

N. K. FORSTER, Chairman,  
W. C. WRIGHT,  
C. B. COMPTON,  
R. S. SAPPENFIELD,  
B. G. KEENEY.

On a second to Dr. Forster's motion by Dr. Giordano, the report was adopted.

*Rules and Order of Business*

Dr. M. C. McKain, chairman of this committee, reported that as no work was assigned to his committee, the committee had no report to make.

*Medical Education and Hospitals**House of Delegates,  
Indiana State Medical Association.*

Gentlemen:

Your Reference Committee on Medical Education and Hospitals approves the report of the Committee on Medical Education and Hospitals and also the report of the Committee on Graduate Education.

Especially does the Committee desire to emphasize that a portion of the clinics as designated by the Committee on Graduate Education be conducted at the Indiana University Medical Center and also that another portion be held elsewhere than the University Medical Center and at such place to be designated by the duly authorized committee.

It also expresses its endorsement of approval and adoption of the expressions as incorporated in the report of the President in which he emphasizes the need of the elevation of standards of medical work by:

1. More effective organization of graduate study in county societies, also in a state program;
2. Encouragement of members to individual study, investigation, and presentation of their work before county medical societies;
3. Improved diagnostic laboratory facilities for rural areas.

MAX A. BAHR, Chairman,  
M. D. WYGANT,  
M. R. LOHMAN,  
EARL VANREED,  
JESSE FERRELL.

Dr. Bahr moved the adoption of this report; motion seconded by Dr. Leonard, and carried.

*Public Policy and Legislation*

*House of Delegates,*

*Indiana State Medical Association.*

Gentlemen:

Your reference committee on Legislation and Public Policy had referred to it, as the first meeting of this body, the report of the Civic and Industrial Relations Committee, the report of the Health Insurance Committee, the report of the standing committee on Legislation and Public Policy, the report of the Public Relations Committee, the report of the State Division of Public Health Liaison Committee to Deal with the Social Security Act, the report of the Township Trustees Liaison Committee, the report of the Veterans' Affairs Committee, and the report of the Committee on Expert Testimony.

Your reference committee has gone carefully over the reports of the above committees, as printed in the handbook for members of the House of Delegates. It has no special comment to make on any of these reports other than to commend the chairmen and members of these committees for the vast amount of work performed by them during the past year, as shown in their reports.

Following the report of the Expert Testimony Committee by Dr. Max Bahr, it was requested by Dr. Bahr that the committee be discontinued until some other need arose. It is the opinion of your reference committee that Dr. Bahr's request in this matter should be acceded to and that the same policy should be followed in other standing committees under like circumstances.

With reference to the resolution introduced by Dr. Crockett on behalf of the State Board of Medical Registration and Examination, after due deliberation, it is the feeling of the committee that the House of Delegates should refer this resolution to the Council for such action as it sees fit.

Mr. Chairman. I move the adoption of the report of this committee.

R. G. HARKNESS, Chairman,  
WALTER M. STOUT,  
A. E. STINSON,  
B. W. EGAN,  
T. R. OWENS.

The motion of Dr. Harkness for adoption of this report was seconded by Dr. Spigler.

DR. F. S. CROCKETT: I think that you men have the same desire as the Board in upholding the standards of medical practice in the state of Indiana. I have been a member of that Board for six years. During that time we have been continually impressed with the difficulty of maintaining standards through the Medical Practice Act. You cannot depend upon your local prosecutor to go into court and correct things that are illegal practice. . . . We must have available sufficient funds to define legally the limitations of the law in this regard. You and I know there are those who are continually chiseling in on the practice of medicine. . . . There is no money with which we can send an investigator into a community and get a case worked up where it will stand a test in court. This takes money, work and time. Money should come from general taxation. While that is true in principle, the fact remains, as a matter of custom, that each board which licenses its members is expected to operate on the fees collected from licentiates of that board. In investigating other states, we find that other boards have come to such action. We have found that they have been able to clean up the situations that have existed in their states. Gentlemen, the Board desires the same thing that you in your own mind desire. We recognize the points in opposition to this sort of thing—registration fee of \$2.00 . . . but I believe the good outweighs the bad. . . . I would like to see this House of Delegates go on record approving in principle this motion. Then since we have a new election soon, a new board for all we know, I would like to see that the matter, after being approved in principle, is referred to the Council and Mr. Stump for study. I offer the amendment that the House of Delegates approve in principle this resolution and refer

it to the Council with power to act at whatever time it seems desirable to put it through.

(Dr. Giordano seconded Dr. Crockett's motion to amend the reference committee's report.)

DR. H. G. MORGAN: I would like to ask Dr. Crockett if the fees derived from registration would not necessarily go into the general fund and then be appropriated by the appropriating body?

DR. CROCKETT: Yes, I believe that is true. However, that is a matter on which Mr. Stump should advise the Council. . . . It might be possible for the Board to assess each one for the amount needed for the year. Personally, I am not in favor of raising funds in excess of the Board's needs and see them revert to the general fund. . . . You understand that the chiropractors and osteopaths are licentiates of the Board, and this law would apply to them also. The money left at the end of the fiscal year would revert to the general fund. The Board should have authority to assess a smaller registration fee if the experience of the Board justified it.

DR. MORGAN: Quite a few doctors are of the opinion that there are now too many taxes which affect the profession and here is another one to be added. I believe the purpose for which the money is to be used is very commendable in making an attack on those things that are inimical to organized medicine. I can see that by requiring a yearly registration of physicians, several things might happen. For example, there might be someone in a given county who would be unfair to a physician and might have sufficient influence to make trouble in the physician getting his license. In fact, there are many things that could develop from such a plan. Therefore, I think we should give this matter a great deal of thought and consideration before the resolution is adopted.

DR. D. F. CAMERON: In opposing the annual registration fee proposed by Dr. Crockett, I would like to offer the following reasons for such opposition. The State Board asks for this additional money in order to prosecute "cultists" practicing medicine illegally. I wish to emphasize that the Board itself is made up to a considerable extent of medical mongrels for it includes a chiropractor, an osteopath, and representatives of the eclectic, homeopathic and physio-medical branches of the regular schools. Considering the composition of this Board, I believe it would not be very effective in prosecuting "cultists."

Furthermore, this Board has been rather backward in maintaining high medical standards in this state in comparison with the standards required by many other State Boards. As a result, there are frequent fights between this Board and other Boards regarding reciprocity and they conduct their fights in such a way that the ones who suffer most are in many instances first class men who are graduates of some of the best medical schools.

Would it not be much better for each county society or for a suitable committee of our state association to handle any funds which we as regular practitioners would wish to raise and allocate for the purpose of prosecuting "cultists"? Under Dr. Crockett's proposal, chiropractors and osteopaths would be required also to contribute their annual license fee, and it would be reasonable to assume that a Board in including these men would not be very effective in eliminating their own irregular activities.

DR. DANIELS: I would like to move to table the amendment.

DR. F. W. CREGR: I would like to amend Dr. Daniels' motion to table the resolution. My purpose is to move to table that part of the report which deals with this resolution.

This motion was seconded by Dr. Morgan, and carried.

DR. IRA PERRY: I move the adoption of the report exclusive of the exception. Motion duly seconded, and the report of the Reference Committee on Public Policy and Legislation adopted.

*Publicity*

*House of Delegates,*

*Indiana State Medical Association.*

Gentlemen:

Your Committee on Publicity wishes to commend the Bureau of Publicity on the constructive program which has covered such a wide scope of activities. Since the starting of the

Bureau in 1923 it has unquestionably been the means of bringing the medical profession of Indiana into closer relationship with the public by way of education.

The work of emphasizing noteworthy historical facts concerning Indiana medicine should be continued. It certainly has encouraged the development of a spirit of respect and reverence for the fine traditions and history of our profession.

Time does not permit for reference being made to the various activities carried on by the Bureau. Your Committee, therefore, endorses the report of the Bureau as published in THE JOURNAL and compliments the committee on its effective work.

Your committee endorses the report of the Committee on State Fair as appearing in THE JOURNAL and recommends the continuation of making available for distribution material from the scientific exhibit division of the American Medical Association.

H. G. MORGAN, Chairman,  
J. L. WYATT,  
E. A. RAINES,  
T. Z. BALL.

Dr. Morgan moved the adoption of this report. Motion seconded by Dr. Padgett and report adopted.

#### *Hygiene and Public Health*

*House of Delegates,*  
*Indiana State Medical Association.*

Gentlemen:

The Committee on Hygiene and Public Health submits the following report:

(1) The report of the Committee on the Control of Cancer as appearing in the handbook is accepted.

(2) The report of the Committee on Diphtheria Prevention is accepted.

(3) The report of the Committee on the Study of High School Athletics is accepted.

(4) The report of the Committee on Mental Health is accepted.

(5) The report of the Committee on the Prevention of Traffic Accidents is accepted.

(6) The report of the Committee on Puerperal Mortality is accepted.

H. S. LEONARD, Chairman,  
H. M. RHORER,  
C. E. BOYD,  
A. M. KIRKPATRICK,  
CARL B. PARKER.

DR. LEONARD: Your committee studied these various reports and heartily commends them, particularly the report of the Committee on the Control of Cancer. The consensus of opinion of that committee is that education is the primary thing in the study of cancer. We all know that repetition is the art of teaching and if by repetition we can get this subject before the laity we have done a great work, and it is really the medical profession's job to do that. I have talked with the chairman of the Committee on Puerperal Mortality and I find that that is a very active committee. Their work is going on; and they have a lot of new work contemplated, and I am sure that that is true of the other committees. So, Mr. Chairman, I move that we accept the reports of these committees. (Motion seconded by Dr. O. W. Sicks and report adopted.)

#### *Amendments to Constitution and By-Laws*

*House of Delegates,*  
*Indiana State Medical Association.*

Gentlemen:

Your Committee on Amendments to the Constitution and By-Laws unanimously approves the report of the Committee on Codification of the Constitution and By-Laws.

Your committee has studied these changes and we are of the honest and sincere opinion that they are of the best interest of our association and its individual members.

I move the adoption of this report.

T. C. ELEY, Chairman,  
E. O. ASHER,  
H. P. GRAESSLE,  
W. F. CARVER,  
R. H. MOSER.

Dr. Eley moved the adoption of this report; motion seconded by Dr. Birmingham, and carried.

THE CHAIRMAN: In order to clarify the situation, action is necessary in that this constitutes several amendments to the By-Laws. The requirement as to the amendments has been satisfied insofar as they have been before the House for more than one day. You may now act upon the amendments to the By-Laws. The amendments to the Constitution, which are embodied in this report, will have to lie over for one year, during which time they will be printed in THE JOURNAL two times and will come up next year. Do I have a motion for adoption of the amendments to the By-Laws?

DR. ROMBERGER: I make that motion. (Motion seconded by Dr. Padgett, and carried.)

#### *Credentials*

DR. J. N. KELLY: The Reference Committee on Credentials wishes to congratulate the standing committee on its work. We have no criticism to make.

On motion of Dr. Kelly, duly seconded, this report was accepted.

#### *Miscellaneous Business*

*House of Delegates,*  
*Indiana State Medical Association.*

Gentlemen:

The committee wishes to commend the Committee on Arrangements on the annual meeting. It is no small task to care for the many and varied details incident to a program interesting many hundreds of doctors. The disappointments to an arrangements body are oftentimes many, and the compensations to be found are only in the gratitude of those whom they serve. This committee, therefore, wishes to extend to the Committee on Arrangements our gratitude for a job well done.

The report of the Committee on Secretaries' Conference bears evidence that this body has grown from a small unit to one of major importance in the activity of the State Association. The program during the past year was of the highest order. We recommend the adoption of this report.

The Committee on Student Debates have had an extremely busy and a fruitful year. The services offered through the various channels have been enormous. We feel certain that much good has been accomplished and that the public vision along these lines has been greatly broadened. We wish to extend to the committee our grateful appreciation for their untiring efforts in furthering the interest of the public and the profession alike. Now that the year has ended, the job is done, and we recommend, therefore, that the committee be discontinued.

The report of the Committee on Necrology presents a very illuminating essay on the deceased members of the past year. It is detailed and complete, beginning with Bokart's "The Family Doctor" and so fittingly closing with "The Doctor's Creed." The statistical data presented therein might well furnish food for contemplation by those of us who are still carrying on. Of the 89 deaths, 10 lived out their remaining days on private charity or in public institutions. Why must this be? Not why must they need monetary assistance, but why must this be furnished in many instances by the poor house? There is much historical data as well as other facts presented, all of which enter into the structure of a most interesting document. We commend most highly the members of this committee and respectfully recommend the adoption of their report.

This committee recommends that a committee be appointed to be known as "The Committee on Old Age Dependency" whose duties will be to make a study of this condition and report to this body one year hence.

P. J. BIRMINGHAM, Chairman,  
PAUL A. GARNER,  
O. W. SICKS,  
M. F. DAUBENHEYER,  
H. S. MCKEE.

DR. BIRMINGHAM: Would it be too much to ask each doctor to contribute one or two dollars a year for setting up a home for the aged who need support? Your reference committee has recommended that a Committee on Old Age Dependency be appointed. We feel that that sort of a commit-

tee might present something that would eventually solve that situation. Mr. Chairman, I respectfully submit this report and ask its adoption. (Motion for adoption seconded by Dr. Daniels, and carried.)

Dr. E. E. Padgett at this time presented to the House of Delegates the plan of the Federation of Women's Clubs to conduct a campaign on the prevention and cure of cancer during the coming year. The state representative for the Federation, Mrs. George Dillinger, is to appoint a representative in each district who in turn will name a representative in each county to put on programs for the teaching and prevention of cancer. Dr. Padgett said, "I am merely delivering a message and am not taking a stand in this matter. The work of the Federation is coordinated with the work of the cancer committee of the State Medical Association. The Federation asks the endorsement of the House of Delegates in this work." After some discussion Dr. Padgett made the motion "that the representatives of the state, districts and counties be given the word that they are requested to confer with the county medical society in the county in which they propose to hold a meeting before arrangements are made to hold such a meeting." This motion was seconded by Dr. A. M. Kirkpatrick, and carried.

**DR. MORGAN:** In view of the fact that we have been so delightfully entertained during our visit here in South Bend, I move you that the society go on record as expressing our appreciation to the members of the St. Joseph County Medical Society, their families and friends, for the excellent manner in which they have entertained us while here in this city. Also that we express our appreciation for the hospitality accorded us through the Columbia Club, in charge of the Jefferson Plaza, and for the entertainment and the facilities which we enjoyed there, and last but not least that we express our appreciation to the retiring president for his untiring efforts and excellent work in behalf of our organization. Everyone knows that he has given unsparingly of his time and energy to do a very successful piece of work during the years that he has served us as president, assuming part of the unfinished work of Dr. Leach, and then so ably continuing during his own year. I move you, therefore, that we formally adopt these resolutions and that the secretary be instructed to convey the sense of these resolutions to the various parties mentioned.

**DR. E. D. CLARK:** I would like to add three things to these resolutions. One is our expression of appreciation to the press. The press has given us a great deal of attention. And the other two are our thanks to Notre Dame University and the Studebaker Corporation for the cooperation they have accorded us.

These resolutions were seconded by Dr. T. Z. Ball, and passed.

**THE CHAIRMAN:** I can only say I thank you. You have all been very wonderful to me. I have tried to get around to see all of you in your various counties that I possibly could. It has been a pleasure to me. I only repeat that I thank you and I want to say that you have assisted me in every possible way.

Upon the motion of Dr. Daniels, duly seconded, the House of Delegates of the Indiana State Medical Association adjourned *sine die*.

#### INDIANA STATE MEDICAL ASSOCIATION GENERAL MEETINGS

Wednesday, October 7, 1936

The eighty-seventh annual meeting of the Indiana State Medical Association was called to order at the Jefferson Plaza, South Bend, on Wednesday, October 7, 1936, at 9:20 a. m. by the president, Dr. R. L. Sensenich, South Bend.

The invocation was offered by the Reverend Pryor Smith, of South Bend.

Dr. D. A. Bickel, chairman of the State Committee on Arrangements, extended a hearty welcome to the visiting members, and expressed the hope that the meeting would not only be interesting and profitable, but pleasant and enjoyable. He said it was through the active, wide-awake local society that the arrangements for this meeting were completed.

Dr. Bickel then presented Dr. J. E. McMeel, president of the St. Joseph County Medical Society, who extended a welcome. He expressed regret that Mayor George W. Freeremuth was unable to be present and present the keys of the City of South Bend. The mayor sent greetings through Dr. McMeel.

Dr. J. W. Hilbert, local chairman of the Committee on Arrangements, was introduced. He said it had been a pleasure and a privilege to prepare this meeting, and he hoped the members would find it interesting.

Dr. R. L. Sensenich, South Bend, president of the State Association, then delivered the president's address.

The scientific program was then taken up.

Dr. Byrl Raymond Kirklin, professor of radiology, University of Minnesota, Minneapolis-Rochester, Minnesota, presented a paper entitled, "Roentgenologic Features of Acute Pulmonary Affections."

Dr. Lincoln Fleetford Sise, Boston, Massachusetts, presented a paper entitled, "Present-Day Anesthesia."

Dr. Russell Lafayette Cecil, professor of clinical medicine, Cornell University Medical College, Ithaca, New York, and professor of internal medicine, New York Polyclinic Medical School and Hospital, New York, presented a paper entitled, "The Early Diagnosis and Treatment of Pneumonia."

Dr. Frederick A. Collier, professor of surgery, University of Michigan Medical School, Ann Arbor, Michigan, presented a paper entitled, "Water Metabolism."

The meeting adjourned at 12:50 p. m.

Thursday, October 8, 1936

The meeting was called to order at 9:25 a. m. by Dr. George Green, South Bend, vice-chairman of the Section on Surgery.

Dr. Frank Lyman Adair, Mary Campau Ryerson Professor of Obstetrics and Gynecology, The School of Medicine of the Division of the Biological Sciences, University of Chicago, Chicago, presented a paper entitled, "The Cervix Uteri."

Dr. Lee Wallace Dean, professor of otolaryngology, Washington University School of Medicine, St. Louis, Missouri, presented a paper entitled, "Nasal Sinus Disease of Infants and Young Children."

Dr. Francis Eugene Senear, professor of dermatology, University of Illinois College of Medicine, Chicago, presented a paper entitled, "Early Diagnosis of Syphilis and Its Treatment."

Dr. Elmer Louis Sevringshaus, associate professor of medicine, University of Wisconsin Medical School, Madison, Wisconsin, presented a paper entitled, "Treatment of Disturbances of the Thyroid and Parathyroid, and of Anterior Pituitary and Gonads."

Dr. John A. Toomey, associate professor of pediatric contagious diseases, Western Reserve University School of Medicine, Cleveland, Ohio, presented a paper entitled, "A Critical Evaluation of Recent Advances in the Prophylaxis and Treatment of Contagious Diseases."

At the close of the scientific program the president, Dr. R. L. Sensenich, thanked the members for their attendance and attention. He stated that the meeting next year would be held at French Lick Springs, and it was hoped to have as good a meeting as this one.

The meeting adjourned *sine die* at 1:00 p. m.

#### SECTION ON SURGERY

The Section on Surgery was called to order at 2:00 p. m. by the chairman, Dr. W. C. Moore, Muncie.

Dr. James F. Balch and Dr. William N. Wishard, Jr., Indianapolis, presented a paper entitled, "The Surgical Aspects of Hematuria," Dr. Balch discussing the portion relating to the kidney, and Dr. Wishard that of the bladder. The papers were discussed by Drs. Sam W. Litzenberger, Anderson; C. J. Cooney, Fort Wayne; H. D. Pyle, South Bend, and in closing by the essayists.

Dr. O. O. Alexander, Terre Haute, presented a paper entitled, "Postoperative Thrombophlebitis." Discussed by Drs. R. G. Ikins, Lafayette; W. C. Moore, Muncie; Anson G. Hurley, Muncie; Paul Beard, Indianapolis; L. T. Rawles, Fort Wayne; M. E. Klingler, Garrett, and in closing by the essayist.

Dr. Don F. Cameron, Fort Wayne, presented a paper entitled, "Intestinal Obstruction Due to Gallstones," "Report of Three Cases." Discussed by Dr. Franklin E. Hagie, Richmond.

Dr. W. D. Little, Indianapolis, presented a paper entitled, "Traumatic Aneurysms of the Extremities." Discussed by Dr. R. N. Bills, Cary.

Dr. M. D. Wygrant, Mishawaka, presented a paper entitled, "The Use of Non-Padded Plaster Casts to the Leg and Foot." Discussed by Drs. William Donald Davidson, Evansville; J. M. Cordon, South Bend; Charles L. Viney, Logansport; G. J. Garceau, Indianapolis; R. B. Acker, South Bend, and in closing by the essayist.

The following officers were elected:

Chairman, George Green, South Bend.

Vice-Chairman, Paul Beard, Indianapolis.

Secretary, Frank Ramsey, Indianapolis.

The meeting adjourned at 5:15 p. m.

### SECTION ON MEDICINE

The Section on Medicine of the Indiana State Medical Association convened at 2:00 p. m. on Wednesday, October 7, 1936, and was called to order by the chairman, Dr. A. S. Giordano, South Bend.

Dr. Lall G. Montgomery, Muncie, read a paper entitled: "Asthma Due to House Dust." Discussed by Drs. M. K. Miller, South Bend; Bennett Kraft, Indianapolis, and in closing by the essayist.

Dr. B. M. Edlavitch, Fort Wayne, read a paper entitled "Diabetes Mellitus as a Comparatively Simple Clinical Problem." Discussed by Drs. H. L. Cooper, South Bend, and John H. Warvel, Indianapolis.

Dr. J. T. Witherspoon, Indianapolis, read a paper entitled "The Physiology of the Anterior Pituitary Hormones and Their Clinical Application." Discussed by Dr. M. V. Kahler, Indianapolis.

The following officers were elected for the year 1937:

Chairman, Dr. E. M. Van Buskirk, Fort Wayne.

Vice-Chairman, Dr. George Dillinger, French Lick.

Secretary, Dr. B. C. Keeney, Shelbyville.

Dr. Chester A. Stayton, Indianapolis, read a paper entitled "Clinical Diagnosis in Contrast with X-ray Diagnosis." Discussed by Drs. B. E. Ellis, Indianapolis, and Lyman R. Pearson, Indianapolis.

Dr. Paul J. Fouts, Indianapolis, read a paper entitled "Pernicious Anemia and Its Treatment." Discussed by Dr. B. G. Keeney, Shelbyville.

Dr. John Eric Dalton, Indianapolis, read a paper entitled "Pregnancy Complicated by Syphilis." Discussed by Dr. F. R. N. Carter, South Bend.

Adjournment.

### SECTION ON ANESTHESIA

The Section on Anesthesia of the Indiana State Medical Association convened at 2:00 p. m. on Wednesday, October 7, 1936, and was called to order by the chairman, Dr. Charles N. Combs, Terre Haute.

Dr. Combs said that the first session of this Section, held last year, had been watched with considerable interest by the entire Society to see whether it would prove to be a success. The program and the attendance last year had been everything that could be hoped for, and this, the second session, promised to be equally successful, if not more so.

Papers were presented as follows:

"Comparative Study of the Complications and Deaths of 2,000 Anesthetics," George M. Rosenheimer, South Bend. This paper was discussed by E. E. Padgett, Indianapolis; E. T. Zaring, Terre Haute; Lillian Mueller, Indianapolis; M. M. Piper, Rochester; S. C. Wagner, Elkhart; J. Y. Welborn, Evansville, and George M. Rosenheimer, South Bend.

"Anesthesia for Thyroid Surgery," L. F. Sise, Boston, Massachusetts. This paper was discussed by Goethe Link, Indianapolis; Franklin Young, Terre Haute; F. T. Romberger, Lafay-

ette, and L. F. Sise, Boston, Massachusetts.

"Spinal Anesthesia; Correlation of Theory and Practice," Richard B. Stout, Elkhart. This paper was discussed by F. T. Romberger, Lafayette; L. F. Sise, Boston, Massachusetts, and Richard B. Stout, Elkhart.

In connection with the Round Table Discussion of Anesthetic Problems which had been arranged, Dr. Sise was requested to speak on pantocaine and 10 per cent glucose. The discussion was carried on by Dr. S. C. Wagner, Elkhart.

The following officers were elected:

Chairman, Richard B. Stout, Elkhart.

Vice-Chairman, Fred Thomas, Indianapolis.

Secretary, Lillian Mueller, Indianapolis.

The Section adjourned at 4:30 p. m. The average attendance throughout the afternoon was approximately 60.

### SECTION ON OPHTHALMOLOGY AND OTOLARYNGOLOGY

The Section on Ophthalmology and Otolaryngology of the Indiana State Medical Association convened at 2:00 p. m., October 7, 1936, on the second floor of the Jefferson Plaza in South Bend. Dr. E. E. Holland of Richmond presided.

The chairman called the meeting to order and introduced the following speakers:

Dr. C. P. Clark, of Indianapolis, presented a paper on "Intraocular Tumors." This paper was illustrated with lantern slides. The paper was discussed by Dr. E. W. Dyar, Jr., of Indianapolis; Dr. C. J. Adams, of Kokomo; Dr. W. F. Hughes, of Indianapolis; Dr. J. V. Cassady, of South Bend; Dr. Carl Rudolph; Dr. E. O. Alvis, of Indianapolis; Dr. E. E. Holland, of Richmond; Dr. George S. Row, Indianapolis; and Dr. Clark, closing.

Dr. B. N. Lingeman, of Crawfordsville, presented a paper on "The Acute Mastoid," using lantern slide illustrations. This paper was discussed by Dr. L. L. Nesbit, of Anderson; Dr. L. W. Dean, of St. Louis; Dr. John R. Frank, of Valparaiso; Dr. E. L. Bulson, of Port Wayne; Dr. E. E. Holland, of Richmond; Dr. M. Ravdin, of Evansville; and Dr. B. N. Lingeman, closing.

Dr. Ravdin suggested that the program for next year include a symposium on the mastoid.

Dr. Eugene L. Bulson, of Fort Wayne, presented a paper on "Vitreous Opacities: Etiology, Diagnosis and Treatment." This was discussed by Dr. E. O. Alvis, of Indianapolis.

At the request of the chairman, further discussions were dispensed with because of lack of time.

Dr. H. C. Wurster, of Mishawaka, presented a paper on "Cerebrospinal Rhinorrhea," which was discussed by Dr. E. L. Rigley, of South Bend.

Section officers were elected as follows:

Chairman, Dr. Fred McKemy, Union City.

Vice-chairman, Dr. B. N. Lingeman, Crawfordsville.

Secretary, Dr. Eugene L. Bulson, Fort Wayne.

The Section on Ophthalmology and Otolaryngology adjourned at 5:00 p. m.

### WOMAN'S AUXILIARY

#### REPORT OF AUXILIARY BREAKFAST MEETING AT THE CHAIN O' LAKES COUNTRY CLUB, SOUTH BEND, INDIANA, OCTOBER 6, 1936

Mrs. R. L. Compton, of Richmond, presided at this meeting.

New officers for the 1936-1937 term are: President, Mrs. Marcus Ravdin, Evansville; president-elect, Mrs. Fred B. Wishard, Pendleton; first vice-president, Mrs. Maurice Van Cleave, Terre Haute; second vice-president, Mrs. Henry G. Leonard, Indianapolis; third vice-president, Mrs. James W. Baxter, New Albany; fourth vice-president, Mrs.

R. M. McDonald, Mishawaka; recording secretary, Mrs. Alfred Ellison, South Bend; corresponding secretary, Mrs. Herman Baker, Evansville; treasurer, Mrs. Clarence L. Bock, Muncie; committee chairmen: Organization, Mrs. George S. Dillinger, French Lick; Legislation, Mrs. I. N. Trent, Muncie; Press and Publicity, Mrs. E. E. Padgett, Indianapolis; Public Relations, Mrs. J. Crede Miller, Frankton; Hygeia, Mrs. A. C. Rettig, Muncie; Program, Mrs. John J. Connelly, Terre Haute; Exhibits, Mrs. Carl Schoen, New Albany; Pioneer Memorial Committee, Mrs. O. G. Pfaff, Indianapolis; councilor, Mrs. Randolph L. Compton, Richmond; parliamentarian, Mrs. William Davidson, Evansville; historian, Mrs. John T. Wheeler, Indianapolis.

The speaker for the program was Dr. Charles P. Emerson, of Indianapolis, whose topic was "What Can the Woman's Auxiliary Contribute to the Practice of Medicine?"

Guests of honor were Mrs. Rollo K. Packard, a member of the National Auxiliary Board of Directors, and Mrs. James P. Simonds, National Chairman of Press and Publicity. Both ladies brought greetings from the National Auxiliary and expressed appreciation of the work which is being accomplished in Indiana.

Two new auxiliaries have been organized, one in South Bend, and one in New Albany.

Mrs. Edmund D. Clark, of Indianapolis, gave a report about the meeting of the National Auxiliary in Kansas City.

MRS. E. E. PADGETT, *Chairman,*  
*Press and Publicity Committee.*

#### COUNTY SOCIETY REPORTS

BOONE COUNTY MEDICAL SOCIETY held a dinner meeting at the Ulen Country Club, September 15, to hear Dr. C. O. McCormick, of Indianapolis, discuss "Rectal Ether Oil Analgesia in Labor." Dr. McCormick presented a thirty-five minute motion picture to illustrate his talk. Five nurses from Witham Memorial Hospital were present as guests of the society.

The Boone County Society held a dinner meeting October thirteenth at the Ulen Country Club, Lebanon, when a three-reel motion picture on "Oxygen Therapy" was shown. At this meeting Dr. E. A. Rainey gave a report of the State Association meeting in South Bend.

CASS COUNTY MEDICAL SOCIETY members met at the Cass County Hospital in Logansport, September eighteenth. Motion pictures on "Normal Labor" from the Department of Maternal and Child Welfare of the Indiana Division of Public Health were shown. Attendance numbered seventeen.

DAVIESS-MARTIN COUNTY MEDICAL SOCIETY held a meeting at the Daviess county hospital, September twenty-second.

DEARBORN-OHIO COUNTY MEDICAL SOCIETY met at the Chatter Box in Lawrenceburg, September twenty-fourth, for a dinner meeting. Dr. Daniel Davies, of Cincinnati, Ohio, presented a paper on "Rupture of the Uterus." Attendance was twelve.

(Continued on page xxiv)

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**OBSTETRICS**—Informal Course; Intensive Two Weeks Course starting February 1, 1937.

**FRACTURES AND TRAUMATIC SURGERY**—Informal Practical Course; Intensive Ten Day Course starting February 15, 1937.

**EAR, NOSE AND THROAT**—Informal Course; Personal Courses; Intensive Two Weeks Course starting April 5, 1937.

**OPHTHALMOLOGY**—Intensive Two Weeks Course starting April 19th.

**UROLOGY**—General Course Two Months; Intensive Course Two Weeks; Special Courses.

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DELAWARE-BLACKFORD COUNTY MEDICAL SOCIETY resumed its regular meeting, September twenty-ninth, with the first fall meeting being held at the Hotel Roberts in Muncie. Dr. Hugh A. Cowing, of Muncie, gave a report on "Protamine-Insulin."

ELKHART COUNTY MEDICAL SOCIETY met at the Coppers hotel in Nappanee, October first. Dr. Thurman B. Rice, of Indianapolis, talked on "Certain Practical Aspects of Bacteriology and Public Health."

ELWOOD MEDICAL SOCIETY held a dinner meeting at the Mercy hospital in Elwood, September twenty-second. Dr. A. J. Micheli, of Indianapolis, spoke on "Some Obstetrical Problems."

FLOYD COUNTY MEDICAL SOCIETY met at New Albany, October ninth, for a dinner meeting. Dr. Parvin M. Davis talked on "Injuries to the Spine and Their Treatment." Attendance numbered fifteen.

FORT WAYNE (ALLEN COUNTY) MEDICAL SOCIETY held a meeting at the Chamber of Commerce Building, September fifteenth, to hear Dr. B. M. Edlavitch present a paper on "Clinical Study of Insulin-Protamine." Attendance numbered thirty-six.

FOUNTAIN-WARREN COUNTY MEDICAL SOCIETY members met at Mudavia Sanitarium, Kramer, Indiana, October first. Dr. D. C. McClelland, of Lafayette, was the principal speaker, his subject being "Treatment of Cancer." Attendance numbered twenty-eight.

GIBSON COUNTY MEDICAL SOCIETY met at Princeton, October twelfth for a dinner meeting. Dr. F. H. Jett, of Terre Haute, talked on "Industrial Surgery." Attendance numbered twenty.

HENDRICKS COUNTY MEDICAL SOCIETY met at Danville, September seventeenth at noon for a luncheon meeting. Dr. Jewett V. Reed, of Indianapolis, talked on "Injuries of the Skull and Traffic Accidents of the Day." Attendance was fourteen.

HOWARD COUNTY MEDICAL SOCIETY held a meeting October second. Dr. Frank C. Walker, of Indianapolis, presented a paper on gynecology.

INDIANAPOLIS (MARION COUNTY) MEDICAL SOCIETY held a dedication of its new home in the Antlers Hotel, Indianapolis, October thirteenth. Tea was served to members and their families in the new club rooms in the afternoon; a dinner was served at 6:30, and at eight o'clock, Dr. Virgil Simpson, of Louisville, Kentucky, presented a paper on "The United States Pharmacopoeia."

Dr. J. William Wright won the Indianapolis Medical Society's golf tournament in the final games at the Highland Golf and Country Club, September twenty-third.

The October twentieth meeting of the society was held at the nurses' home of the Methodist Hospital. This was a joint meeting with the Methodist Hospital staff society, and the program was under the direction of the officers of the society. The principal speaker was Dr. Goethe Link, who discussed diseases of the parathyroid.

LAPORTE COUNTY MEDICAL SOCIETY met September twenty-fourth in LaPorte. Dr. Arnold Schimberg and Dr. N. N. Crohn, of Chicago, were the speakers. They discussed the injection treatment of rectal diseases and hernia.

LAKE COUNTY MEDICAL SOCIETY members numbering seventy-five attended the regular September meeting, September seventeenth, at the Mercy hospital in Gary.

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### PRESENT DAY ANESTHESIA\*

LINCOLN F. SISE, M.D.  
Boston, Massachusetts



L. F. Sise, M.D.

The various fields of medicine are making rapid progress over a broad front, and in this general advance that portion of medicine which has to do with anesthesia is contributing its share. For many years after the discovery of nitrous oxid, ether, and chloroform, progress was extremely slow, but in more recent years, over a period roughly corresponding with the rise of the specialty of anesthesia, progress has been rapid and at an accelerating rate.

#### INTRAVENOUS ANESTHETICS

Intravenous anesthesia was attempted as long ago as 1872. Various drugs were used, such as chloral hydrate, hedonal, and ether. While a number of successful cases were reported, it was not very satisfactory and some fatalities occurred. The modern approach to this subject was reached only with the introduction of the barbiturates for this purpose. The first one of these used, however, was unsuitable. Its analgesic action was slight in proportion to its hypnotic action. Because of this, it was necessary to put the patient very deeply under the influence of the drug in order to permit surgical procedures. This, however, was dangerous because the very prolonged action of the drug made any great measure of control impossible. The patient, once put deep, stayed there because of this prolonged action. Moreover, this prolonged action kept the patient in a state of depression for many hours after the anesthesia and provoked a tendency toward pulmonary edema and other pulmonary complications.

#### BARBITURATES

Only with the recent arrival of the truly short acting barbiturates with a higher degree of analgesic action, has intravenous anesthesia become a truly satisfactory procedure. Their action is so very short that the patient constantly tends to come out of the anesthesia unless further doses are repeatedly administered. Thus a degree of control is possible which approaches that with ether. Recovery takes place in five or ten minutes after short anesthesias and in half an hour, more or less, after prolonged ones. Induction is pleasant and smooth. The anesthesia permits the use of cautery and diathermy without danger of explosion, and it gives the surgeon a free field in operations about the head. Its outstanding advantage, however, is the excellent recovery following its use, and the striking absence of vomiting. At the Lahey Clinic, these last features have impressed the surgeons very favorably, and it has, therefore, become a very popular anesthetic for a variety of operations of any length not requiring deep anesthesia.

Most of these operations have fallen within the fields of bone and joint surgery and of central nervous system surgery. Satisfactory muscular relaxation has been obtained for such procedures as manipulation of joints and reduction of fractures. Its non-explosive character renders it very suitable for use in the x-ray room for such procedures as the management of fractures under fluoroscopy or the making of encephalograms. Because of the striking lack of postoperative upset, it has proved satisfactory in such longer procedures as spinal or sacroiliac fusion, laminectomy and craniotomy.

In giving this anesthetic for short procedures, we have attached the syringe directly to the intravenous needle, kept the needle in the vein until the end of the operation and repeated the injection of the drug as needed. For long procedures, we have used an intravenous drip of normal saline solution, and have administered the drug as needed by puncturing the rubber tubing with a hypodermic needle near the intravenous needle. In this way

\* Presented before the general meeting of the Indiana State Medical Association at South Bend, October 7, 1936.

it has been an easy matter to continue the anesthesia for three or four hours, or even longer.

#### SPINAL ANESTHESIA

Spinal anesthesia has been the subject of much controversy. The chief objections which have been raised to it are its depressive effects, its limited and sometimes too short duration and, more recently, the possibility that it may affect the central nervous system harmfully.

That such harm may result, particularly from the use of too concentrated solutions of the anesthetic drugs or of the use by error of entirely wrong drugs, is well known. But that such harmful effects may result solely from a well given spinal anesthetic is an open question. Certainly they must be extremely rare. However, when such results do occur, they are so disastrous that their bare possibility now constitutes the greatest deterrent to spinal anesthesia, since the first two objections of depression and shortness are now pretty well overcome.

The depression of spinal anesthesia is now under such good control that the risk, when this anesthesia is given by an experienced anesthetist to a patient in reasonably good condition, is slight. Certainly the beneficial effects far outweigh the risk. Just what particular factor has brought about this change, it would be hard to say. The change is due probably to a number of different factors working together, and prominent among these factors is the use of the newer, powerful, long acting drugs. Here again we cannot be too dogmatic in deciding just why depressive effects are less. Two explanations seem possible. In the first place, the dose of these drugs is extremely small as compared with the older drugs. Thus less of the drug is absorbed into the circulation to produce systemic effects as compared with the amount affecting nerve tissue to produce anesthetic effects. This is comparable to the well known fact that in infiltration anesthesia dilute solutions produce less systemic effect than do concentrated ones. In the second place, the lessened depressive action of these drugs is probably due to a distinct difference in their action in that they act with less intensity on the sympathetic nervous system and thus produce less vaso-dilation. Whatever the mode of action, there is very general agreement among the users of these drugs that they produce less depression than is the case with the older drugs, such as novocaine.

#### CHANGES IN TECHNIC

There are also changes in technic which facilitate the more accurate placing of the anesthesia and thus lessen the chances of its running to dangerously high levels, and changes which make use of extremely dilute solutions of anesthetic drugs. There is the more efficient use of such drugs as ephedrine, adrenalin, and oxygen. The use of artificial respiration with oxygen has produced

striking and gratifying results. In the three cases in our experience in which we have been unfortunate enough to produce complete paralysis of the thoracic muscles and diaphragm, such artificial respiration with oxygen has alone sufficed to carry the patient through operation without noticeable depression of blood pressure, with no disturbance to the surgery, and with normal convalescence in each case. While paralysis of respiration should most certainly not be lightly regarded, yet the very high efficiency of this measure must largely remove the extreme dread which has been felt at the possibility of this complication.

Whatever the cause of the change, the fact remains that our mental attitude at the Lahey Clinic has changed from constant worry over the possibility of a fall in blood pressure during this anesthesia to a practically complete absence of any apprehension whatsoever. That some of this change is due simply to the fact that we have become accustomed to some fall in pressure without disastrous results is not to be denied. But it is by no means this only, for we are emphatically not of that school which regards with complacency a drop in blood pressure almost to the vanishing point.

These newer drugs have also another important advantage, and that is their prolonged action. Previous to their use, one could hardly be assured of an abdominal anesthesia of more than one hour. It might be more, but again it might not be even that. The sudden ending of a spinal anesthesia in the midst of an abdominal operation can be disastrous, accompanied as it may be by straining and rigidity during the induction of general anesthesia. Thus the surgeon's mental attitude in these cases is apt to be one of hurry and of fear that the anesthesia will not last until he has completed his work. All of this is changed by the use of these long-acting drugs, pontocaine and nupercaine, which will produce an anesthesia of virtually any length desired.

#### INHALATION ANESTHESIA

In inhalation anesthesia, the outstanding event of recent years has been the introduction and perfecting of *carbon dioxide absorption*, and this technic has completely changed inhalation anesthesia. First suggested by Jackson, its use in anesthesia today is due almost entirely to the efforts of Waters. Waters' first apparatus, which has in fact been very little modified even today, consisted simply of a cannister of soda lime which was placed in the breathing circuit between the patient and the breathing bag. The carbon dioxide exhaled by the patient combined with the soda lime and was thus taken out of the breathing circuit. Unfortunately this apparatus was so cumbersome and heavy that the method was not at first readily taken up by other anesthetists. It was only after Sword developed the circuit breathing type of ap-

paratus, which enabled the heavy cannister of soda lime to be supported by the gas machine, that the method became really popular.

This method makes possible a tremendous saving in the use of anesthetic agents, notably the gases. These agents may be breathed back and forth indefinitely by the patient without losing their potency. Consequently, only enough of the agent has to be added to the original mixture to make up for absorption by his tissues and for loss due to leaks in the closed circuit, though in the case of the weaker agents, particularly such as nitrous oxid, better results are obtained by continuing some flow of gas to wash away the nitrogen given off from the patient's body. Of course, enough oxygen must be added to replace that used by the patient.

By the older method, a regular flow of anesthetic gas was necessary to get rid of the carbon dioxid. By far the greater portion of the gas used was simply a vehicle for washing this away. Under the new method, it is eliminated much more cheaply by means of soda lime. The anesthetic agent is thus relieved of its double duty and is left with the sole duty of producing anesthesia.

The absorption method eliminates carbon dioxid from the breathing mixture much more thoroughly than can be done by the older method except by a very large and, therefore, a very expensive flow of the gases. The result of this more thorough elimination is that respiration is more quiet and more like the normal respiration.

It has been our impression that there is less vomiting where the absorption method is used, but this has not been proved statistically.

The absorption method also greatly lessens the fire hazard when using inflammable mixtures such as ethylene, cyclopropane or nitrous oxid-ether. If the closed system is kept perfectly tight, it is impossible for ignition to take place from any outside source. As the inside of the closed system is fairly drenched with moisture by the breathing back and forth of the warm, moist gases, accumulation of charges of static electricity is definitely prevented. It is, therefore, difficult to see how ignition can possibly take place from the inside of the circuit.

#### INTRATRACHEAL ANESTHESIA

While intratracheal anesthesia is not at all new, the carbon dioxid method of anesthesia has greatly facilitated its application. This method allows the use of to-and-fro breathing through large intratracheal catheters with a tightly closed system, where formerly insufflation, an open system or a considerable flow of gas was necessary. This makes the use of gases much more suitable. This combination of carbon dioxid absorption with intratracheal breathing through a large catheter produces the most quiet, easy, and natural type breathing of any technic in inhalation anesthesia.

The intratracheal type of anesthesia is exceedingly useful in any sort of obstruction in the air passages from the teeth almost to the bifurcation of the trachea. It is useful when the anesthetist must be at a distance from the head of the patient because by it he may be absolutely assured of a free and open airway under any and all conditions. It is quite useful in anesthesia for abdominal operations since it promotes the most quiet type of breathing and prevents the possibility of interruption by laryngeal spasm. It is useful in preventing the inhalation of blood and detritus in operations in the mouth and nose, and is virtually a necessity for this purpose in operations in the pharynx. Depending upon the site of these operations, the tube may be passed through the mouth or through the nose.

*Endo tracheal cuff.* This is a rubber inflatable cuff, which is slipped over the intratracheal catheter, an inch or so from the tip, and which may be inflated through a fine rubber tube after the catheter and cuff have been inserted in the patient's trachea. When this cuff is inflated, it tightly closes the space between the outside of the catheter and the inside of the trachea, and thus effectually prevents the escape of the anesthetic vapors out through the trachea or the inhalation of blood or detritus in through the trachea.

Its usefulness in preventing inhalation of fluid was well shown in experimental work with dogs. Dogs were put under gas anesthesia; an intratracheal tube was inserted, and the cuff inflated. These dogs were then put entirely under water, when the anesthesia could be continued exactly the same as before. They were kept an hour or more under water, and on removal to the air and discontinuance of the anesthetic, they recovered promptly, with no ill effects. These experiments simply show in dramatic form the effectiveness of this cuff in sealing the trachea against the ingress of fluids from without. This effectiveness is frequently used to prevent the inhalation of blood and detritus, where the location of the operation is such as to make this a danger.

#### INTRABRONCHIAL ANESTHESIA

Intrabronchial anesthesia goes a step further than intratracheal anesthesia. The catheter is passed not only into the trachea, but through it and into one of the main bronchi. The bronchus may then be sealed by a cuff and the trachea sealed by another cuff as just described. Respiration is now entirely limited to the lung to which the catheter leads. The other lung is effectively sealed off by the cuff in the trachea. While the catheter which is inserted in the bronchus is necessarily somewhat long and comparatively small, breathing through it is rendered easy by the use of helium, to be described later in this article.

In thoracic surgery intrabronchial anesthesia has two advantages: (1) the lung to be operated

upon is rendered immobile, thus facilitating the work of the surgeon; (2) the inhalation of secretions by the normal lung is prevented. If, for example, bronchiectasis is present in the affected lung, the removal of negative pressure on opening the pleura and the manipulation of the lung will both tend to express secretions into the bronchi. As the affected lung is uppermost, there is a natural tendency for these secretions to gravitate down the bronchi toward the trachea, where they may easily find their way by inhalation and gravity into the dependent bronchus leading to the normal lung. This sequence of events is effectively prevented by means of the two cuffs. At the end of the anesthesia, suction is applied through the catheter during its removal to take care of secretions which may have accumulated during operation.

*Vinyl-ether.* The history of this drug is different than that of the other inhalation anesthetics. It was not discovered by accident or incidentally, but direct specifications were written for it and the drug was then produced. C. D. Leake, on going over the chemical characteristics of the various anesthetics, decided that a drug having certain chemical characteristics ought to make a good anesthetic. This drug was vinyl-ether, and when it was made, it proved to be indeed a good anesthetic.

It is a clear, colorless liquid like ordinary or ethyl ether. Its vapor is only slightly irritating, and it is highly volatile. These two properties make for a quite rapid induction, and its volatility produces an equally rapid recovery. In fact, recovery and induction approach the rapidity of the gases, and thus we have in vinyl-ether a drug closely comparable to a very powerful gas. It has, however, some tendency to the production of mucus, and to muscular and laryngeal spasm. It also has sufficient toxicity for the liver to make inadvisable long and deep anesthesia with it. It is useful wherever a short anesthesia with relaxation is indicated. It provides an excellent induction for ordinary ether and may be used as an adjuvant with the gases. It is recommended in obstetrics. The facts that its action is quite rapid, that it produces a considerable degree of relaxation, and that, unlike the gases, it is easily portable, and can be given virtually without apparatus, make it a very convenient and useful anesthetic in many situations.

*Cyclopropane.* This drug was discovered by accident by Henderson and Lucas when they were hunting for the toxic agent in propylene, of which it is an isomer. It was then investigated and applied clinically by Waters and his associates, to whom great credit is due.

It is a gas which liquefies at 75 pounds pressure, a much lower pressure than is the case with any other anesthetic gas or oxygen. It is a far more powerful gas than is nitrous oxide or ethylene, and may, therefore, be used with an abundance of

oxygen. This property also makes it unnecessary to wash out the nitrogen from the breathing system as is the case with the other gases. This saving of gas makes the total amount necessary to use extremely small and reduces the cost practically to that of ether. It does not stimulate respiration, so that breathing is very quiet. It produces considerably more relaxation than nitrous oxide or ethylene, but not nearly so much as ordinary ether. It has virtually no toxic action upon any of the organs or functions of the body with the exception of the heart. It is depressant to the heart, and probably has some direct toxic action on the heart muscle in high concentrations.

Cyclopropane is useful wherever gas anesthesia is indicated. It is particularly advantageous in lung surgery because of the abundance of oxygen which may be used with it, and because it has sufficient power to control reflex effects satisfactorily. The abundance of oxygen also makes it probably advantageous in cardiac cases. Its ability to produce a certain degree of relaxation makes it useful in numerous conditions. It is used by some in abdominal surgery, but it does not seem to us that it produces sufficient relaxation to make it a proper anesthetic for most of these operations, though it is quite suitable for cesarean sections.

Helium mixtures are useful in cases of respiratory obstruction. The density of helium is 0.138 as compared with 1 for that of air. It has the smallest specific gravity of any element with the exception of hydrogen, but unlike hydrogen, it is non-inflammable. Therefore, helium will "thin" or lower the density of any gas with which it is mixed, with the exception of hydrogen. Thus it has been demonstrated that an artificial air composed of 79% helium and 21% oxygen can be moved in greater volume and at the same time with less force or effort through a given aperture than can ordinary air. This artificial helium air has been used therapeutically with success in conditions of respiratory obstruction or fatigue such as asthma or pneumonia.

The addition of helium to any of the ordinary mixtures of inhalation anesthetics produces a similar effect, and enables larger volumes of these mixtures to be breathed through a constricted opening and with less effort by the patient. Thus it is of value in all cases of respiratory obstruction.

The use of helium, however, is not a panacea for obstructed breathing, and especially it is not a substitute for a clear airway. This latter still remains a prime consideration in inhalation anesthesia and only when it cannot be obtained should helium be resorted to. Where, in spite of best efforts to secure a clear airway, slight obstruction still remains, and where conditions are such that intubation of the patient does not seem justified, helium may be added to the anesthetic mixture to relieve the patient's breathing for the remainder of the procedure. While the results are not spectacular, considerable benefit is obtained, and many

cases show a gratifying relief of obstruction.

It is in the very severe grades of obstruction that the most striking results are obtained. But here, since the obstruction is severe to begin with, even though considerable relief is obtained, the breathing is not sufficiently free to proceed for long, so that intubation should usually be resorted to. Helium has its greatest use in the interval before this can be accomplished. In our experience, the benefit of helium has been most strikingly demonstrated in cases coming to the operating room with obstruction of marked degree from pressure on the trachea or from paralysis of the vocal cords. Here helium has been used simply during the induction of general anesthesia for purposes of intubation. A mixture approximating 79% helium and 21% oxygen has first been used and then cyclopropane has been added to this. The breathing at first becomes easier as the helium mixture is applied but becomes less easy as the heavy gas cyclopropane is added. The relief afforded by the helium, however, is sufficient to make possible this second period of induction of anesthesia, and intubation. The helium has thus afforded relief during a period when otherwise fatal asphyxiation would have been close at hand.

Another situation in which breathing is necessarily slightly obstructed is in intrabronchial anesthesia. Labored breathing here would be a distinct disadvantage. The use of helium, however, keeps the breathing easy and quiet.

In using helium it is necessary to employ a considerable flow of the gas in order to wash away the nitrogen exhaled by the patient. If this is not done, the heavy gas nitrogen collects in the system and makes breathing difficult. The potent gas, cyclopropane, is the only anesthetic gas suitable for use with it since with nitrous oxide or ethylene there is not room for helium in the mixture. These two gases require 80% to 90% of the mixture; so when the necessary oxygen has been added, there is no room left for helium. Cyclopropane, however, is so potent that it needs but from 15% to 20% of the mixture to produce anesthesia and there is, therefore, ample room left, both for oxygen and for sufficient helium.

Thus in cyclopropane anesthesia, when enough helium is used to wash away the nitrogen exhaled by the patient, marked relief is obtained of obstructed respiration which cannot be relieved in other ways.

The nervous patient fares much better with his anesthesia today than in previous periods. When straight ether was the usual anesthetic, a patient's sensations were often terrifying. While a well-given ether is not at all unpleasant to take, it is possible to reproduce in the patient all the sensations of being strangled to death. The almost universal use of gas, at least for induction, has put an end to that.

The patient of today is prepared well before operation. The night before operation, he prob-

ably will receive a hypnotic and obtain a restful night. The next morning he will receive preliminary medication which usually will be sufficient to relieve his mind of worry and apprehension. In talking with patients having spinal anesthesia, I have been struck with the effectiveness of this medication. When interviewed before having spinal anesthesia, a considerable number of patients will state that they are too nervous to go through the procedure without a general anesthetic, but afterwards they will say they did not mind it a bit—and an abdominal operation under spinal anesthesia is a pretty good test of the effectiveness of preliminary medication.

Some patients, however, are indeed too nervous. They are gripped by such a terrific and unreasoning terror that no ordinary measures will overcome it, nothing short of unconsciousness. The great difficulty comes in recognizing this type of patient beforehand and picking him out from those just mentioned. Such a patient as this, in the conscious state, may be subjected not only to great mental anguish, but to actual shock as well. He should, therefore, be rendered unconscious, preferably in his room. This may usually be done by means of rectal anesthesia with tribromethanol, paraldehyde, or a barbiturate, or by means of an intravenous barbiturate.

In general, it may be said of present day anesthesia that it opens up to the anesthetist a wider choice of anesthetic agents and methods and, therefore, makes possible a more suitable anesthesia for any given condition than ever before. This wide choice makes the position of the anesthetist more difficult and more important since wider knowledge, more experience and better judgment are needed to enable him to decide which is the most suitable anesthetic in any given case, and to administer it with the necessary skill.

The specialty of anesthesia must therefore be given new responsibilities. Each hospital should have a physician anesthetist at the head of a department of anesthesia with such personnel under him as is suitable for the size of the hospital. This can be done only through the desire of the surgeon for better anesthesia. Many surgeons do not appear to appreciate the benefit which may accrue to their surgery from better anesthesia. The period of surgery roughly just closing has been one of new and wider application, new fields of operation, new types of operation, and better technic. The period just opening appears to be one of consolidation of these gains, one of refinement and detail. The surgeon of today must lower his mortality and improve his postoperative results if he is to keep pace with the times. One of the factors which will enable him to do this is a choice of anesthetic suited to the needs of the occasion and administered with skill and judgment. To stand at the front today, the surgeon must avail himself of every possible resource, and anesthesia is

certainly an important factor in the process of operation.

The field of anesthesia is now so wide and complex that no man who is not devoting all his time to it can hope to attain the necessary experience and facility in all its various branches. To get the best out of anesthesia, competent men must devote their entire time to it. These men will not be attracted to anesthesia unless they can receive from it a remuneration comparable to that which they could get in other fields of medicine.

Thus there is a decidedly economic aspect to this subject. This I will not go into at length, but I will say that here as elsewhere we cannot expect to get the best without paying for it. The lack of adequate remuneration is holding back the development of anesthesia in many places. This will not be corrected until surgeons realize the importance of anesthesia to them, and the fact that they cannot accomplish their best surgery without having the best anesthesia.

At the present time, there is a grave lack of competent, well trained, experienced anesthetists to fill the potential demand, a demand which even now is beginning to make itself felt. Therefore, both undergraduate and postgraduate education is necessary if we are to supply men properly trained to fill this personnel. With a realization by surgeons of the importance of anesthesia to them, with adequate training and remuneration for its personnel, anesthesia will begin to occupy the place which it should if surgeons are to do the very best they can do for their patients.

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#### ABSTRACT

#### TERMINATION OF ONE THOUSAND ATTACKS OF MIGRAINE WITH ERGOTAMINE TARTRATE

MARY E. O'SULLIVAN, New York (*Journal A. M. A.*, Oct. 19, 1936), states that ergotamine tartrate administered to ninety-seven patients checked or aborted 1,042 attacks in eighty-nine of these persons. It was calculated that the individuals in this series were relieved from 39,000 hours of suffering. The earlier in the attack the medication is given, the better are the results. When used subcutaneously, the alkaloid has never failed to check again an attack in a person previously relieved if the drug was given in adequate dosage. Untoward effects of the drug may be relieved by simultaneous injection of  $\frac{1}{100}$  grain of atropine or calcium gluconate intravenously. She does not consider the drug a cure for migraine. She strongly advises against its dispensation without a consideration of the cause and prevention of the syndrome. Because of the constancy and character of the relief obtained from 1,042 headaches in eighty-nine sufferers of migraine after the administration of ergotamine tartrate, she recommends its use for the termination of these attacks and believes that the drug is a valuable addition to medical therapeutics.

## DISEASES OF THE CERVIX UTERI\*

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The development of the cervix uteri is important in understanding the diseases to which it is subject. This applies not only to its gross but also to its minute development. The cervix, as well as the corpus of the uterus, results from the fusion of the two Müllerian ducts. It sometimes happens that these structures do not develop equally and consequently an asymmetrical canal or cervix is formed. In other instances the fusion is incomplete and a partial or complete duplication of the cervix occurs. Anomalies of development undoubtedly account for some abnormalities of the cervical canal and glands.

It should also be recalled that another duct, the Wolffian, undergoes retrogressive changes in the female but sometimes persists. It may pass into the substance of the cervix and occasionally gives rise to pathologic processes.

The minute changes are important, especially those shown in the surface and glandular epithelium. The upper portion of the vagina has the same embryologic origin as the uterine tubes, the corpus and cervix of the uterus. The epithelium of the cervix is, however, of two types. That which covers the portio is squamous and resembles that which lines the vagina. The endocervix has a form of epithelium which differs from that of the portio and that of the corpus uteri. The typical cervical epithelium is of a high columnar type with basal nuclei. It covers the surface and lines the deeply penetrating racemose glands which secrete a heavy tenacious mucus in sexually mature women.

It is important to note that there are lines of demarcation between these types of epithelium; first, near the external os where there is usually an abrupt transition from the squamous to the high columnar type of cervical epithelium; second, near the isthmus of the uterus where the corporeal can be differentiated from the cervical epithelium. These types of epithelial cells and structures which are quite characteristic in the adult apparently come from a common source and are not so easily distinguished the one from the other in fetal, infant and child periods.

In fetal life the cervix is relatively large as compared with the corpus and this difference persists through infancy; the epithelium of the various portions of the genital tract is not so easily distinguishable the one from the other and glands

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are poorly developed.

The fetal uterus is apparently subjected to some hormonal stimulus, probably of maternal origin, which causes some overgrowth because there is a postnatal involution of the uterus.

The infant type persists with a relatively large cervix until puberty approaches and hormonal activity stimulates uterine growth and the development of the adult type. The epithelial elements undergo some development during infancy and childhood with a tendency to greater differentiation of the various types and to greater glandular development.

In addition to the changes mentioned which may be considered progressive, one has to recognize that there are certain changes affecting the cervix which are retrogressive and atrophic in character. These result from alteration in the hormonal activity which is associated with the natural or artificial menopause and also with certain disease conditions which affect the ovaries and their hormonal activity.

The female genitalia, as has been stated, participate in certain physiologic changes which occur in association with the establishment of extrauterine life, of puberty, sexual maturity and the climacterium. The cervix undergoes certain alterations in conjunction with these general processes.

The cyclical changes which occur in association with menstruation, ovulation and gestation are very noticeable in the genitalia and those which occur in the epithelial and subepithelial tissues are most noticeable and characteristic.

The endometrial menstrual cycle and its morphology are quite well known but the participation of the epithelial elements of the endocervix and portio in these cycles is not so well recognized. It is important to realize that these tissues are also subjected to similar influences to which they also react but in a less striking manner.

The cervix is subject to certain developmental anomalies, such as hyperplasia, hypoplasia, atresia and stenosis. It also may show any variation from complete duplication to a perfectly developed single cervix. In case of incomplete duplication, there may be some obstruction which will eventually lead to retained secretion or menstrual flow with resultant dilatation of the parts in which the cervix will participate.

Atypical epithelial development may occur with the occurrence of the cervical type of epithelium on the portio giving rise to the so-called congenital erosion. The opposite condition may occur with an extension of squamous epithelium into the cervical canal for varying depths. Similar variations occur in the relationships of the epithelial types at the level of the internal os.

It is well known that the development of a squamous type of epithelium serves as a protective covering against the inroads of extraneous material. The incomplete development of this type

of epithelium on the more exposed vaginal walls renders them more susceptible to infections. It is well known that the vaginal surfaces of the adult are more resistant to a gonorrhreal infection than those of an infant or child; the cervix on its vaginal portion is also more readily involved, especially if there is a congenital erosion. This has been known for a long time but is further proved by the favorable therapeutic action of follicular hormone in these immature individuals. The major therapeutic effect of this agent seems to be exercised by the stimulation of the production of the mature type of squamous epithelium. A similar phenomenon seems to occur in postmature atrophic conditions involving the vagina and vaginal portio.

Aside from the conditions mentioned there are relatively few diseases of the cervix in the sexually immature female. The vast majority of diseases of the cervix which we encounter are in adults.

One of the most commonly seen conditions is the erosion. An erosion of the vaginal portio may be defined as a lesion in the vicinity of the external os which is characterized by a partial or complete loss of the surface epithelium and a partial or complete replacement with atypical epithelium. It may be considered to differ from an ulcer in that there is no appreciable loss or destruction of the subepithelial tissue in erosions which are never malignant. Erosions are usually infected and show inflammatory reactions. They arise in several ways. The so-called congenital erosion has already been mentioned; it is not primarily infected but, because of the type of covering epithelium, it may easily become so.

Infections of the lower genital tract may cause maceration and loss of the surface epithelium around the external os and replacement occurs from an outgrowth of the cervical epithelium or denudation of the outer layers of the squamous cells.

Trauma is an all important factor, especially that associated with childbearing. Lacerations and abrasions of the cervix leave raw surfaces which become covered with cuboidal or columnar epithelium as the inflammatory reaction affecting the superficial areas subsides. These erosions on these lacerated cervices persist for months or years, as healing does not take place until the area is covered with squamous epithelium. An analogous condition occurs when the laceration is sufficient to permit of some eversion of the cervical lips, thus exposing the endocervix to the bacterial flora of the vagina from which it is normally protected by the small external os and the downward flow of the cervical secretion.

The healing of these erosions has been supposed to occur by a metaplasia of the epithelium or by replacement with newly-formed epithelium.

The best evidence seems to point to a growth of the squamous epithelium underneath the cuboidal and columnar epithelium as we have

demonstrated in serial sections by using a mucicarmine stain to differentiate the mucus-producing from the squamous type of epithelial cell.

The rational treatment of these erosions, therefore, depends upon the cure of the infection and the repair of associated traumatic conditions so that the exposed eroded area may become covered with protecting squamous epithelium. One may best use either chemical cauterization or the fine blade of an electric cautery to destroy the invading epithelium so that it may be replaced by the normal cells. Cauterization should not be done in the presence of any active inflammation of the genital tract, closer than one week to the beginning or ending of a menstrual period, not oftener than a week or ten days, on only one lip at a time, not during a pregnancy, and only when a positive diagnosis of a benign lesion has been made. The technic is to make lineal cauterizations from the external os radiating outward to the periphery of the eroded area.

Ulcers of the cervix are more extensive and involve some destruction of cervical tissue. They may be benign and result from infection with pyogenic organisms. They may be specifically due to infection with the tubercle bacilli or *Treponema pallidum*. The chancroidal ulcer rarely occurs but is apt to be multiple and superficial with ragged, thin edges. The Ducrey bacillus may be demonstrated. Lastly, the ulceration may represent a stage in the development of a malignant neoplasm.

The careful differentiation of these conditions is very essential because of the importance of early recognition, the marked difference in the type of treatment to be instituted, and in the prognosis afforded.

The differentiation of erosion and the various types of ulceration is usually not very difficult if one makes a careful digital and visual examination. The erosion is usually soft and rather velvety to the touch and presents a definite outline; it does not bleed easily, as a rule. The ulcer usually has some cavitation, is inclined to indurated margins and may bleed. The simple ulcer is usually smooth, the tuberculous may be granular with thin margins. The luetic ulcer may be a primary chancre or result from a gummatous formation. The feeling of these is different; the former is firm and does not penetrate the tissue deeply; the latter results from necrosis of deeper lying tissue and presents considerable cavitation of an irregular character. The malignant ulcer is indurated and has a brittle almost cartilaginous feel; it may have a superficial or deep cavitation due to tissue destruction, and it almost always bleeds easily and often profusely on contact.

The visual appearance of these lesions is quite different. The erosion, as a rule, has a red color, looks velvety, has about the same niveau as the surrounding tissue and occasionally is slightly papillary. It does not bleed readily or profusely. It takes the iodine stain very poorly. All the vari-

ous types of ulcers show some cavitation; the benign may have a slight exudate on the surface or have a red color. The tubercular and luetic are less red and are pale or grayish in color; the former presents a granular base with thin, poorly defined, irregular margins. The primary luetic lesion is more or less circular with a smooth base and slightly elevated, rather clearly defined margins. The secondary looks more like a small ruptured cold abscess. The malignant ulcer has an irregular uneven base with irregular margins and appears to be infiltrating the tissues, and bleeds readily on contact. The bases of none of these ulcers stain well with iodine.

The use of cultures, smears, dark field and biopsies is of definite aid in making differential and positive diagnoses.

Inflammatory conditions of the portio may also arise in association with various types of vaginal infections and infestations. One may find lesions mostly superficial in both the mycotic and trichomonas invasions.

Cervical polypi are common and, though frequently palpable and visible on vaginal examination, they are almost always attached either in the cervical canal or the corpus of the uterus.

Polypi should be regarded as secondary rather than primary as they usually are the result of some stimulating factor such as an infection, malignant neoplasm or possibly a hormone which produces an overgrowth of the uterine mucosa. Polypi are generally benign but malignant growths of this type do occur. It is not uncommon to find benign polypi associated with a corpus carcinoma.

One not infrequently finds cervical polypi associated with a pregnancy which seems to stimulate their growth markedly. The bleeding or spotting which is commonly associated with polypi may lead to a tentative diagnosis of threatened abortion where these growths are concomitant with a pregnancy.

Polypi and polypoid growths are very common and while they frequently and ultimately make themselves apparent at the external os they may lie concealed in the cervical canal or corpus for some time. These polypi are usually vascular and have abundant epithelial glandular tissue of the cervical or corporeal type. The presence of squamous epithelium is much less common.

In other forms the cells are mostly of the connective-tissue type, and in some instances fibromatous growths become pedunculated and resemble polypi.

When they have descended to the external os or into the vagina, they almost invariably show marked acute or subacute inflammatory processes, especially on their exposed surface.

It is interesting to note that these growths show reactions during pregnancy which simulate closely the histologic changes found in the tissues from which they are derived.

Polypi tend to be multiple and unless the exciting cause is removed, they tend to recur. In their treatment it is, therefore, important not only to remove the polypi but also to discover the associated condition.

One is frequently handicapped in making a complete diagnosis because of the danger of exploring and curetting the uterus in conjunction with the removal of a cervical polyp which is acutely infected. Serious morbidity and even mortality has followed the removal of an infected polyp accompanied by a uterine curettage.

The treatment is removal by torsion of the pedicle with cauterization of the base or by excision with scissors or curette. They should always be examined microscopically to exclude a possible malignancy. One should follow the case subsequently with care to be sure that there are no more and to detect a possible serious associated condition. In view of the not infrequent occurrence of corporeal carcinoma together with cervical polypi, it is not unwise to perform a diagnostic curettage, if the polyp does not appear to be actively inflamed.

Cystic disease of the cervix is of frequent occurrence and results from either infection or trauma from parturition or instrumentation which causes occlusion of the ducts of some of the glands and resultant retention of secretion and dilatation. These Nabothian cysts may or may not have their content infected. The condition is usually easy to detect as palpation of the cervix reveals a slightly irregular, nodular and hard surface. When inspected, the surface of the cervix appears slightly uneven and its color varies and may even be whitish or gray over these cystic areas.

This type of cystic change is not limited to the glands underlying the vaginal portio, but may involve more or less extensively the glands of the endocervix. These small retention cysts bulging into the cervical canal may cause more or less tortuosity and some partial obstruction of the canal.

It is important to know that these cervical glands grow deeply into the cervical tissue so that one must realize that it is practically impossible to eradicate extensively diseased glandular structures without removing the cervix almost in its entirety which is a serious procedure.

This type of disease seems to affect the superficial portion of the cervix or at least it is more frequently and readily diagnosed in this area. This is probably fortunate as most of these cases require little if any surgical treatment as a rule, and if the condition at higher levels were diagnosed, many more damaging and extensive operations would be performed upon the cervix than is now the case.

Stenosis of the cervical canal may result from these distended glands encroaching upon its lumen or from neoplasms which partially or completely occlude the lumen. The more common causes are

the formation of scar tissue as the result of inflammatory processes or of trauma from instrumentation or child-bearing.

The deposition of fibrous tissue may be in the vicinity of the external os or at one or more points along the course of the canal. The constriction may be annular or irregular, thus leading to localized narrowing and tortuosity of the canal. Usually there is some dilation above the point of constriction due to the retention of secretion which usually becomes infected. The inflammation is apt to lead to further tissue destruction with loss of epithelium and some ulceration and subsequent fibrosis and adhesions. Fortunately, the wall of the cervix is quite thick and more or less rigid so that the canal does not collapse readily. The secretion and the periodic menstrual flow tend to keep the channel open so that complete acquired closure is almost never seen.

This condition leads to epithelial changes and squamous epithelium may develop at these sites. One could regard the chronic irritation associated with this disorder as a causative factor of endocervical carcinoma in an individual predisposed to cancer. Usually a persistent leukorrhea is present. The treatment of this condition is to provide adequate drainage by dilatation, by operative restoration of the canal or by removal of the uterus.

Endocervicitis of varying degrees may antedate or follow many of the conditions previously mentioned. The most common symptom is that of leukorrhea where the alkaline and pathologic secretion drops more or less continuously into the vagina and may be responsible for pathologic conditions arising there. The infecting agent may be the gonococcus which, as a rule, is not very tenacious of life though it may lurk in glandular recesses and serve as a nidus for reinfection. Secondary involvement with the various pyogenic organisms may occur. Injuries of the cervix in association with instrumentation, abortion and labor are common and these wounds frequently become infected.

Infections arising in the cervical canal may spread along the course of the lymphatic channels and produce acute, subacute or chronic inflammations in the paracervical tissues.

Exudates, abscesses and persistent induration may occur in the region of the cardinal and uterosacral ligaments.

The treatment of these endocervical inflammations is to promote free drainage, apply antisепtics, such as acriflavine, gentian violet in glycerine, silver nitrate, etc. The cautery, if used at all in the endocervix, should be employed with extreme caution as all the dangers previously mentioned are even greater than when its use is limited to the vaginal portion.

Where chronic inflammations are associated with lacerations of some degree, especially in women who have completed their child-bearing activities, operations for repair are indicated.

One has to consider all these diseases of the

cervix and the treatment employed from the standpoint of the relief of the leukorrhea which is the most constant symptom, the relation to conception, as many of these conditions are productive of infertility, their effect upon abortion and upon the functional capacity of the cervix during labor. Naturally in women who have passed the child-bearing era, some of these considerations have no longer any significance.

The cautery is effective, but must be used properly and cautiously. Conization has its place as does operative therapy, but, as a rule, the latter two should not be employed where future child-bearing is contemplated. The use of antiseptics in proper strength is harmless. The employment of heat, especially if it can be properly regulated, is of definite value particularly in those cases where inflammatory conditions have extended beyond the cervix.

The relation of these chronic lesions to carcinoma of the cervix is not clear, and there is at present no positive evidence that these conditions have any definite etiologic relationship to cancer. Further, one should remember that the indications for the treatment of these conditions are for the cure of the disease and its symptoms and not for the prevention of cancer of the cervix. We should not induce patients to undergo a surgical procedure upon the supposition or assurance that the development of a cervical carcinoma will be prevented. We are standing upon much safer ground when we restrict our operative procedures to those patients in whom the disease per se constitutes an indication for the surgical procedure.

Leukoplakia of the cervix is a relatively rare disease, but no doubt more cases would be found as tiny lesions, possibly precursors of squamous-celled carcinoma, if there were more common and expert use of the colposcope.

One is rather skeptical about accepting the idea of precancerous lesions, but should be receptive to the idea that we do not perhaps know the morphologic picture of the earliest development of cancer. This is due to the fact that when the disease is diagnosed clinically, the neoplasm is usually quite well-developed. We should, therefore, attempt rather to learn if possible the microscopic picture of cancerous lesions in the earliest possible stages.

Leukoplakia of the cervix might be one of the means of supplying this all important data. This is recognized mostly by the visualization of a whitish plaque-like area which is very slightly elevated and quite clearly outlined with irregular margins. The microscopic picture shows usually a rather clean cut line between the normal squamous epithelium and the proliferating but non-invasive epithelium of the lesion.

While earlier clinical diagnosis of cervical carcinoma would be possible if the patients came for examination sooner, nevertheless, one cannot expect many patients to present themselves for exam-

ination until symptoms appear. As things now stand, many women do not come for some weeks or even months after the occurrence of symptoms. It would be possible to detect early carcinoma if patients would come routinely for examination, and one could make careful palpatory and visual examination, using the colposcope on suspicious lesions. In this way, one could ultimately determine the earliest microscopic appearance of the carcinomatous lesion.

In considering the diagnosis of cervical carcinoma, it is of the very greatest importance to remember that it may begin on the portio or in the endocervix. In the latter instance it is not easily available for either palpation or inspection.

The carcinoma of the portio appears as a small ulcer or excrescence either on the squamous or on an eroded surface. The palpatory finding is the imparting of a peculiar sensation to the examining finger. The area feels friable or brittle and the contact excites bleeding. The visual examination shows an ulcer with an irregular base and margins which appear infiltrated and irregular in outline.

There is little use in discussing the appearance of advanced carcinoma with tissue destruction, crater formation, necrotic, friable and bleeding tissue. If one cannot make a diagnosis then from the appearance, he should at least suspect it and make a biopsy. It is the recognition of the early lesion which may be easily overlooked that is of the greatest importance because every week the treatment is postponed diminishes the chance of increasing the life expectancy or securing a cure.

The endocervix may harbor a cancer close to the external os in which case it probably would be of the squamous type. The growth may commence in the vicinity of the internal os and it may be difficult or impossible to determine whether it originates in the cervix or in the corpus. This location favors the adenocarcinomatous type. As in the previous type, contact bleeding following douching, coitus, etc., is one of the earliest signs and intermenstrual bleeding is always significant at any period beyond 25 years of age. On palpation, little may be felt and on exposure of the cervix, inspection may reveal a fairly normal appearing cervix.

The best office method of examination is the sounding of the canal with a cotton applicator or a uterine sound. In this way, contact bleeding may be elicited, irregularity or obstruction of the canal may be felt, or a crater discovered. If there is doubt left in the clinician's mind, hospitalization and cervical curettage with radium available should be done promptly.

The symptoms and diagnosis of the corpus carcinoma are omitted from consideration here.

The present-day treatment is the proper application of radium and the use of deep x-ray therapy. It is not my purpose to discuss this as it is my opinion that proper therapy of this type requires just as much experience as was formerly

required to perform the extensive radical hysterectomy for cervical carcinoma.

It is my purpose to stress emphatically the importance of certain things for which the individual doctor must assume responsibility:

1. The careful examination of every woman who presents herself for routine examination and especially of the one who has any suggestive symptoms.

2. The establishment of a diagnosis by biopsy if necessary.

3. The examination of the tissue by a competent pathologist, as mistakes may be made in two directions: first, failure to diagnose a cancerous lesion; second, the diagnosis as malignant of a non-malignant condition.

4. The institution of prompt and appropriate treatment. This therapy should be radiotherapy in the vast majority of cases. Surgery should be rarely employed and then only in conjunction with radiotherapy.

It seems wise to devote a brief consideration to the cervix during pregnancy. There are definite physiologic changes in the cervix which involve not only the epithelial portions but also the fibromuscular segment. The epithelium proliferates, the glands become dilated and filled with mucus, thus forming the mucous plug. The fibers hypertrophy and the vascularity is increased. The altered appearance of the epithelium may be confusing in making a diagnosis of malignancy.

It is unnecessary to reiterate the fact that all the pathologic conditions previously mentioned may occur during pregnancy in a somewhat modified form. One need not repeat that the trauma and often the infections associated with labor and the puerperium predispose to some of these disorders.

Carcinoma of the cervix, while not common during pregnancy, may be easily overlooked and it must be ever remembered that benign lesions tend to bleed more easily because of the increased vascularity associated with pregnancy. The treatment of carcinoma of the cervix during pregnancy becomes a highly individualized and complicated procedure because one has to consider the result not only from the standpoint of the mother, but also from that of the fetus. Two main factors govern our management. One is the period of gestation, and the other is the stage of the disease.

Early cases early in pregnancy should be treated largely from the standpoint of the mother. Late cases early or late in pregnancy should be managed from the viewpoint of the welfare of the fetus. Early cases late in pregnancy require management which considers the welfare of both.

The cervix of the uterus is one of the most important structures of the female genitalia from both a physiologic and a pathologic viewpoint. Anyone who practices obstetrics or gynecology should know not only what to do, but also what not to do to this important part of the uterus.

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## POSTOPERATIVE THROMBOPHLEBITIS\*

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Terre Haute

During the summer of 1935, my interest in thrombus formation and thrombophlebitis as a postoperative complication was suddenly and dramatically aroused. Since that time it has never waned. During a period of six weeks at that time there occurred in my practice three cases of post-operative thrombophlebitis, two following cholecystectomies, one with drainage of the common duct and one without, and the third followed a simple appendectomy for the relief of intermittent appendicitis. All, as is customary, occurred in the left lower extremity.

It is a notorious fact that this complication is very likely to occur to individual surgeons and in clinics in this manner. That is, they may be entirely free from anything of the nature for a period of months or years, then with dramatic suddenness there appears a whole group of cases presenting this complication. For this reason it is difficult to formulate and evaluate any definite methods of prevention. At the time to which I am referring, whether because there was occurring over the country an increase in this condition or whether it was a mere coincidence, the current literature was rich with material on the subject. A short time before, the late George E. Brown of The Mayo Clinic had become interested and was using his splendid analytical mind in attempting to determine causative factors, particularly from the bio-chemical standpoint, and many of his reports were appearing. At about the same time, Dr. W. Walters, of the same clinic, had apparently given the matter considerable thought and clinical study and was recommending the use of thyroid extract as a preventative measure. I must also mention in this connection a paper by Dr. Leo M. Zimmerman, of Chicago, which appeared in *Surgery, Gynecology and Obstetrics* in October, 1935. This paper is, I believe, the most complete analysis of the subject published recently. Dr. Zimmerman approached it both from the standpoint of animal experimentation and clinical observation. A little earlier Dr. John Homan, of Boston, had contributed a great deal to the literature on the subject.

In approaching the study, most investigators have divided the factors into two broad classifications: (1) physical; and (2) bio-chemical. The bio-chemical factors have not been thoroughly worked out and there are numerous divergent views in relation to them so that it is my intention to confine this paper to the physical factors. There is, however, a promise of much in the theories and prove either one by animal experimen-

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future with reference to the bio-chemical factors and one's thoughts may be led far afield in their contemplation.

There are certain individuals, as we well know, who have an abnormally slow clotting time. These are bleeders or near bleeders and, on the other hand, there are other individuals who have what we might term an almost pathologically rapid clotting time. It is interesting to note that there is a possibility of an abnormally fast clotting time being slowed by the administration of sodium thiosulphate or drugs of like character, prior to operative procedure. There is also some evidence to show that this drug hastens recovery when administered early in cases of advanced thrombophlebitis of the character of phlegmacia alba dolens.

The earlier writers, in grouping the physical factors, placed trauma first, infection second, slowing of the blood stream third, and dehydration fourth. It is clearly apparent at the present time, however, that slowing of the blood stream, or stasis, plays by far the most important role in the etiology. If one considers for a moment the fact that thrombosis rarely if ever occurs in the arteries, owing to the rapidity of the current, it is at once apparent that this statement is true. It is also difficult to explain phlebitides in the left iliac and femoral veins following a procedure high on the right side of the abdomen on the basis of trauma. The fact that the preponderance of phlebitides occur on the left side is usually attributed to the differences in the anatomical relationship of the vein and the artery on the two sides. On the left side the artery crosses the vein, thus producing added pressure and consequent retardation.

It is not with the true phlebitides, after all, that we are particularly interested, since it has been shown often and is easily understood that danger of embolism is inversely proportional to the amount of inflammation accompanying a thrombus. The large thrombus firmly adherent to an inflamed intima is not easily displaced and, therefore, much less likely to produce a fatal embolism, one of sufficient size to completely block the pulmonary artery. It is true that suppurative softening following infection frequently develops in this condition, later liberating showers of small infective emboli. Our chief interest lies with the pure thrombus forming in a vein without trauma of the intima, due entirely to stagnation and eddying of the current, easily dislodged, thus producing a fatal pulmonary embolism of large magnitude. Before leaving the subject of the true phlebitides entirely, it is interesting to note that in times past among investigators there has been considerable discussion as to whether the edema in cases of true thrombophlebitis of the extremity is due to the cutting off of the venous return through obstruction of the large deep veins or is due to the blocking of the accompanying lymphatics. It seems that the investigator may take his choice of the two

tation. It has been definitely established, however, that whenever the large deep veins of the lower extremity are occluded by a true thrombophlebitis there is a tendency to canalize so that the blood returns through the normal channels within a very short time after the establishment of the phlebitis. This is of practical importance, of course, in the injection treatment of superficial varicose veins. The Trendelenburg test should always be used prior to injection; however, it is almost safe to say that never are the deep veins totally occluded other than during the active stage of a thrombophlebitis.

To return now to the pure thrombus without phlebitis, in which the factor of stasis and eddying of the blood stream is of vital importance, it might be well to review somewhat the physical factors which are responsible for the return flow of blood from the extremities to the heart. The positive pressure in the vena cava is produced first by the slight suction action of the heart in diastole; second, by the regular rhythm of the respiratory muscles, very prominent of which are the muscles of the abdominal group, and possibly some slight vasomotor action of the sympathetic nervous system. The valves in the veins also play a role; however, it is a well known fact that in many individuals the valves are incompetent. The same factors, of course, are responsible for the positive pressure in the veins of the extremities, the suction action of the heart in diastole, decreasing naturally in direct proportion to the distance from the heart. The action of the voluntary muscles of the extremities are of vital importance as an active agent in the return of the blood to the heart through the large veins.

Consider now the average patient entering the hospital for an abdominal operation. To begin with he is probably below par physically; otherwise he would not fall in the class of operative prospects. Shortly after admission to the hospital he is given some form of barbituric acid, which in one not accustomed to its use, produces a profound sleep which in turn produces a decrease in the blood pressure, respiratory rate, and movements of the voluntary muscles of the extremities. Prior to his entering the surgery he is given additional barbiturates together with an opiate and sent to the operating room in a state of coma or semi-coma with a lowered blood pressure, a lowered respiratory rate and an almost complete absence of movement in the voluntary muscles. Some form of spinal anesthesia is administered. (Spinal is mentioned, not because it is favored or disfavored nor because it is the intention to enter into a discussion of the relative merits or demerits of the various anesthetic agents, but because it is inherently felt that with the entrance of spinal anesthesia into common usage there has in all probability been an increase in the complication which is under discussion, for reasons which will be enumerated.) A strap is then placed across the patient's thighs

and the patient by this means is strapped to the table with, of course, varying degrees of compression at this particular point. All of the agents enumerated, the barbiturates, the opiates, the novocaine crystals in the spinal canal, are respiratory depressants. The spinal anesthesia, in addition, lowers the blood pressure, this being partially counteracted by the preliminary administration of ephedrine, but above all, for the time being, it completely paralyzes the muscles of the lower extremities, varying from thirty minutes to three hours, depending upon the agent used, the amount, the level of injection, etc. Following the operation, the patient is returned to the room and for a number of minutes or hours, under the influence of the spinal anesthesia and the barbiturates, lies in a state of coma or semi-coma with a very shallow respiratory movement and an almost complete absence of the voluntary movements of the lower extremities. It is apparent that these factors all tend to produce stagnation and eddying of the blood in the large veins of the extremities and in this manner must certainly tend to increase the likelihood of thrombus formation, not necessarily a true thrombophlebitis but the thrombus of fairly large magnitude which has been mentioned and which, owing to its very loose attachment to the intima of the vein, is easily dislodged with all the potentialities of a fatal pulmonary embolus.

It is not my intention to decry the use of barbiturates or the opiates prior to operation. These are niceties, almost necessities in modern operative procedure. It is not my desire to decry the use of spinal anesthesia; in certain types of cases, to my mind, it is the anesthetic agent of choice. I merely desire to call attention to the fact that by the use of these agents we are greatly increasing the likelihood of one of the greatest bugbears of modern aseptic surgery.

As to possible prevention, perhaps there is none. On the other hand it is felt that there are certain procedures which, if instituted and thoroughly carried out, may reduce the incidence of thrombus formation.

A few years ago, Dr. Eugene Pool, of New York, devised a method of systematic passive motion and exercise for the immediate post-operative patient. This is good. At least the nurse in attendance during the recovery of the patient should be instructed to massage the legs frequently until the patient completely recovers from the anesthetic. The patient should be encouraged to move his extremities early and often; the position in bed should be changed frequently during convalescence.

In all probability we are confining our patient to bed for too long a time following operative procedures. He should be sitting up in a chair at the first moment the attending surgeon feels to be at all compatible with other factors. The abdominal dressing should not be tight, and full breathing should be encouraged in every possible manner. As stated earlier, Dr. Walters of The

Mayo Clinic, after a thorough trial, advocated the use of thyroid extract on the theory that by stimulating all of the vital processes along with the increase in blood pressure, stagnation of the venous flow was lessened. Whether he continues in this belief and is still following it, I do not know; however, it seems plausible unless otherwise contraindicated.

#### SUMMARY

I have attempted to bring out in this paper just one point: the use of preliminary barbiturates, opiates, and spinal anesthetics are conductive to post-operative thrombus formation, and any procedure which can in any way lessen this hazard should be carried out with the greatest exactitude.

ROSE DISPENSARY BUILDING.

#### DISCUSSION

R. G. IKINS, M.D. (Lafayette): I was particularly interested in Dr. Alexander's reference to the effect on the circulation from the use of barbiturates and spinal anesthetics. I think it is agreed that we cannot now account for this complication on the basis of physical factors alone. I believe that the slowing of the circulation incident to the use of narcotics would explain a number of cases.

As to spinal anesthesia, my observation is that it occurs more frequently following spinal than when inhalation anesthetics have been used.

One interesting thing about thrombophlebitis is the relative infrequency with which it occurs in children. I have no explanation for that.

With regard to treatment, I have seen a number of cases that were treated during the chronic stage, that is after the acute symptoms subsided, with satisfactory results. There is, of course, always a possibility of causing an extension of the thrombus and of producing other emboli that may mean a fatal consequence. I believe that every postoperative case presenting symptoms of pain referable to the lower extremity, particularly on the left, should be regarded as a phlebitis until it can be satisfactorily diagnosed otherwise. The prognosis in these cases has been improved by the use of heat and rest, particularly in the early cases. Certainly all activities should be reduced to the minimum.

As to the prevention of phlebitis, I have nothing to add in addition to what the essayist has said. I have seen thyroid used a number of times during the early stages, but as to whether thrombophlebitis is prevented by it I cannot say. I do not believe that we have any absolutely satisfactory explanation as to the cause of this condition. Certainly, the trauma of operative surgery is a logical factor.

W. C. MOORE, M.D. (Muncie): I would like to ask the essayist if he would object to the statement that the incidence of thrombophlebitis is increased in the seasons in which upper respiratory infections are the highest?

W. D. GATCH, M.D. (Indianapolis): I would like to ask some questions. I do not remember ever seeing embolism following the radical operation for carcinoma of the breast, nor one following thyroidectomy. I believe that some people have something in their systems that predisposes to thrombosis. I know of one family in which the father had an almost fatal pulmonary embolism following appendectomy; the son had a thrombosis following extraction of a tooth, and later died of mesenteric thrombosis; one sister had a pulmonary embolism following a gallbladder operation. It has been my observation that patients who have hypertension practically never have postoperative thrombosis. The blood pressure is so high that they do not have it; at least that has been my experience.

In the way of prevention: first of all, light anesthesia. I think the patient should be moving about the table as soon as we are through with the operation. A skillful anesthetist will do that. Massage of the limbs should be started as soon as the patient is out of the anesthesia. Twelve hours after operation, you often will find the patient lying motionless, flat on his back. He should be encouraged to move.

With regard to Dr. Moore's question, I have thought at times that we should see more cases of thrombosis in the periods of upper respiratory infection than during other times. However, I have no proof, and it would be a difficult thing to prove. On theoretical grounds, we would expect thrombosis to occur more often than when there are no bacteria in the blood stream. I do believe that a systematic observation of the rules that Dr. Alexander has laid down will do a great deal to lessen the frequency of postoperative thrombophlebitis.

ANSON G. HURLEY, M.D. (Muncie): The factors of changes in the blood itself and in the velocity of the blood stream as etiological factors of postoperative thrombophlebitis have been very well emphasized. I would like to suggest a third possible etiological factor, namely, changes in the endothelial lining of the vessels themselves. It is an interesting observation that the incidence of postoperative thrombosis has increased rapidly in the past few years, paralleling the increase in the intravenous route as a method of administering medicines. Examples of this are the frequent administration of arsphenamine, typhoid vaccine, pre- and postoperative intravenous fluids and glucose, calcium intravenously, etc. It may be reasonable to believe that these agents in some manner alter the endothelium of the vessels in certain individuals so that a thrombus begins to form more easily. Into perfectly normal veins, a very sclerosing agent can be injected without thrombus formation while it is well known that in varicose veins, in which there is always a diseased endothelium, thrombus formation can be induced by very mild agents. So I feel that in addition to the factors

of stasis and changes in the blood stream, a third factor of changes in the endothelial lining of the vessels is to be mentioned.

PAUL BEARD, M.D. (Indianapolis): The factor I want to emphasize is slowing in blood pressure. In that, thyroid extract will help. I think the hypo-thyroid state is often a factor.

The next point I want to emphasize is that when a hemostat is placed on a vessel, one should be very careful in placing it, and on releasing it to replace it posteriorly to the point where it was first placed.

The third factor of importance is the placing of a bandage across the lower abdomen. In placing an adhesive band at the inguinal region, you will find that unless you are very careful, the band will go over the great vessels and produce compression.

L. T. RAWLES, M.D. (Fort Wayne): I have enjoyed this paper very much, possibly because I was appointed by the staff of St. Joseph Hospital to go over the literature, and try to find out something about the cause and prevention of thrombophlebitis, in 1932. At that time I wrote to the American Medical Association for some literature, and when I got through I knew just about as much about it as before I started. After a perusal of this literature, I think we can come down to probably three or four factors that can be considered in the causation of thrombophlebitis. I do not believe that trauma in ordinary surgery is such a very great factor in producing postoperative thrombophlebitis. I believe that the slowing of the circulation enters into the formation of thrombophlebitis more than trauma. I believe this can be improved to a fair degree by the use of thyroid extract. It has been used by Walters at Rochester, and I believe by some German surgeon before him. In cases that have a slow circulatory system, thyroid extract does hasten the blood stream.

Another factor that was brought out by our chairman is the question of the influence of acute respiratory infections on the formation of thrombophlebitis. They may and probably do have some influence, especially where you have streptococcus hemolyticus infections. I believe it is rather hard to point to anything that produces thrombophlebitis; it is rather the result of two or three things acting together.

M. E. KLINGLER, M.D. (Garrett): In recent years we have had more thrombophlebitis cases than ever before. I would be in favor of the formation of a committee to study this situation.

It is an awful thing in any surgeon's life to have a patient die with so startling a thing as thrombophlebitis or to have the long drawn out swelling of a limb resulting. Even though we seem to be failing to prevent the incidence of this condition, we have been able to prevent the long drawn out convalescence with developing varicose veins and varicose ulcers. This we do by never

letting the patient keep the limb down long enough to allow swelling. If one allows time for the accessory veins to enlarge, almost all of the final grief is taken out of the limb-thrombosis. This may take several months, but the time is well spent.

O. O. ALEXANDER, M.D. (Terre Haute) (closing): I was talking principally about pure thrombus formation and not thrombophlebitis. The first discussant talked about infection and trauma. These factors may enter into thrombophlebitis, but I feel that they play little or no role in pure thrombus formation.

Dr. Moore spoke about the incidence of thrombus formation during the seasons of acute respiratory infections. The statement was made that at The Mayo Clinic and at most hospitals, there is a rule that roentgen examination of the chest shall be made following any sudden increase in postoperative temperature. If this were done universally, no doubt many of the so-called mild pneumonias might be found to be thrombi in the smaller branches of the pulmonary arteries.

Dr. Gatch mentioned family tendencies to thrombus formation. I have no doubt of this familial tendency. He also mentioned that he had never had a case of thrombophlebitis following a breast amputation or a thyroid operation. It is a peculiar fact that insofar as I have been able to ascertain there never has been reported a case of thrombophlebitis following a thyroidectomy. This fact may have played an important role in Dr. Walters' line of reasoning when he began using thyroid extract as a preventative in thrombus formation.

Dr. Gatch also spoke of dehydration. This point was not stressed since it was taken for granted that in all modern hospitals, the matter of water balance is carefully looked after.

Dr. Hurley mentioned the possibility of changes in the intima of veins following intravenous medication as a possible factor in thrombus formation. This may be true; however, I think this possibility should not influence our injection treatment of varicose veins in the lower extremities since it has been amply demonstrated that we have a back flow of blood in the saphenous vein with our patient in the upright position and a consequent eddying of the current.

The mere fact that no one, either experimentally or clinically, has been able positively to demonstrate the exact cause of thrombus formation and thrombophlebitis is all the more reason for further discussion and study of this subject.

Dr. Rawles stated that he had studied the subject exhaustively and that after he had finished he knew as little as he did when he started. This has not been my experience. I realize that I have added nothing to the sum total of knowledge of postoperative thrombus formation, but I do feel that the subject is all important, often the difference between life and death, and is deserving of most careful study by both clinicians and laboratory research workers.

## SYPHILIS COMPLICATED BY PREGNANCY\*

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Pregnancy complicated by syphilis is a problem towards which every medical man should bear a great enthusiasm. It opens to us several avenues through which invaluable services can be rendered with most gratifying results:

(1) By the early recognition and continuous treatment of such disease in the gravid patient, we can practically eradicate congenital syphilis.

(2) By a close follow-up of the children born of these mothers, the infected infants can be recognized early, treatment instituted, and a high percentage of cures obtained.

(3) By the continuous treatment of the mother to adequacy, we can largely safeguard her from complications which might later render her physically unfit to care for her family.

(4) By the investigation of all members of the family, we have the means of bringing to treatment large numbers of heretofore unrevealed or inadequately treated infections.

(5) By such attentions to mothers, infants, and families, we can prevent great numbers from becoming wards of public support.

To accomplish these aims, a plan is necessary. Denmark provides an outstanding example of the results obtainable from an intelligent project. Regardless of their social status, they require the routine Wassermannization of all pregnant women and the treatment of those infected. As a result, there remains but one hundred cases in their population of four million, or 0.000025% as against the stated average of 5% in our child population. Though this single procedure is so capable of reducing transmission, it will not reveal the seronegative syphilitic woman, who is still capable of transmitting her disease. Thus, in addition and with lues foremost in our minds, a careful history should be taken and physical examination should be performed, in the hope of uncovering the seronegative patient. Further, when an infected woman is found, no doctor has discharged his duty until he has appraised her fully of her condition and outlook, has tentatively outlined her treatment and seen it instituted, and has brought all other members of the family to examination. If one believes her disease acquired, he must bring the husband and former children to anamnestic, physical and serological examination, or, if her disease is regarded as congenital, it requires the seeing of her father, mother, brothers, and sisters. In either event, those infected are to be advised re-

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garding treatment and the non-infected continued for serological and physical observation over an adequate period.

Since the problem of child-bearing and marriage is so interrelated, it seems justified to consider momentarily the question of whether the syphilitic patient may marry and, if so, what rules are to guide our sanction. This subject introduces two factors for consideration—(1) the likelihood of their infecting an innocent mate, and (2) the possibility of their transferring the disease to their offspring. In both of these matters, the congenital luetic assumes a different status than the acquired luetic, because it is now believed that the congenital syphilites are neither infectious to their mates nor do they transmit to their offspring, unless they acquire a super- or re-infection. However, the question of the eligibility of the acquired luetic for marriage is not so easily ruled upon and differs somewhat with the sex of the individual. From this point on, our discussion will deal with only those parties whose disease is acquired.

The male, who was diagnosed early in his disease, who has completed two years of regular continuous alternating therapy, who has followed an additional three-year observational period, and who has maintained freedom from signs in his blood, spinal fluid, and physical examinations from the sixth month of treatment, is considered neither likely to infect his mate nor to transmit to his offspring. Even with these stipulations followed, reports exist in which such husbands have infected their wives. In view of the fact that, under modern therapy, still 5% to 10% of such males develop clinical neurosyphilis and that 15% develop cardiovascular lesions, we see the necessity of urging these men to continue life-long periodic examinations. Only by the early recognition and treatment of such developments can we hope to prevent the severe incapacitations which might bring the patient and his dependents to ask charity. The once accepted theory of paternal transmission now lacks definite proof. Certain pathologists have suggested that the *treponema pallidum* may have a life cycle in which it assumes a granular form and as such infect the male cell. However, until this is proved, acceptance of such a theory will remain untenable for, in the spirillum form, the organism is too long to be incorporated into the sperm.

The same rules, regulating the marriage of the male, apply to the female. With the five-year period elapsed, she probably is not infectious to a partner but, even though all examinations are negative, she may still remain a potential source for infection of her offspring. Because of our ability to demonstrate spirochetes in the placenta and cords of luetic pregnancies, the weight of opinion favors maternal transmission as the only means by which syphilis is passed to the fetus. Thus the infected female who enters marriage is to be cautioned, at the first knowledge of each

pregnancy and regardless of her previous treatment and observational background, she must take treatment throughout pregnancy, unless her physician is forced to discontinue treatment because of drug intolerances. The sterile syphilitic, desirous of children, may sometimes conceive under reinstatement of therapy.

This brings us to a consideration of methods safeguarding a non-infected mate from the luetic, who marries without sanction, and the marital partner, who acquires the disease after marriage. With respect to the former, we might recall that applicants for marriage licenses in the State of Indiana are required to make a sworn statement that they are free from venereal disease. Thus, an untruthful answer to that question constitutes perjury and instances stand in which courts have annulled such licenses. Unfortunately this legal back-up can not always be secured and, in that instance, it remains only for the physician to advise in the conduct of such marriages. Whether their disease was contracted ante- or post-maritally, the non-infected partners must be told in order that they may protect themselves. Neither is a mate to be treated solely because the partner is infected, nor is the non-infected one to receive therapy aimed at prophylaxis. The former may needlessly subject a non-infected person to drugs that are potential poisons, while the latter may arrest the early signs in an infected individual and allow their progression to a late stage before their disease is recognized. If the diseased partner is in an infectious state, it is needless to say that strict isolation is imperative. Beyond that time, both parties should be cautioned to watch for muco-cutaneous relapses and again to enforce isolation during their presence. To advise abstinence from marital relationships after the infectious period is over may only promote extramarital promiscuity. Thus, after that time, marital relations may be allowed providing a condom is used. In these marriages, it is particularly important to impress the infected party with the necessity of full treatment and to insist upon a continued observation of the non-infected partner over a satisfactory period. The male who is believed non-infectious and who desires children should, as an added precaution, be advised to carry an arsenical series during the time the attempt is being made to impregnate the wife. The diseased females of this group are likewise to be advised of the necessity of treatment throughout each pregnancy and the submitting of their offspring for observation.

We return now to some of the problems presented by the pregnant woman who is known or believed to have syphilis. Periodically we meet the erroneous opinion that pregnancy itself may produce a positive Wassermann. It is now generally agreed that a frankly positive Wassermann, verified by repetition, is definitely indicative of syphilis in that female. However, the questionable or weakly positive Wassermann, Kahn, or

Kline is to be evaluated in conjunction with the careful physical and historical examinations for lues which are to be done on all pregnant women. The seronegative gravid female, in whom definite collateral evidences of infection exist, is to be treated, whereas the same such woman, in whom such proofs do not present but in whom the disease is still suspected, is to be checked periodically during the pregnancy to establish her actual status.

Histories of miscarriage and stillbirth, though a suspicious evidence of syphilis, are probably too often regarded as positive signs of such disease. Late studies suggest that those miscarriages occurring particularly in the first half of pregnancy are not due to syphilis. Examinations of fetuses born of luetic mothers in this early period have failed to reveal positive evidences of syphilis, while those delivered in the latter half of such pregnancies show a rather high percentage of positive findings. To explain this, it has been suggested that the cylindrical layer of Langhans' cells, which exist early beneath the surface of the placenta at its attachment to the uterus and which begin to atrophy at this mid-period, act as a barrier to the passage of organisms into the fetal circulation. Regarding the method by which the spirochete passes from the mother to the child, two theories have been proposed: (1) that an infectious embolus infarcts a placental vessel and the organisms grow through the walls; (2) that the spirochetes attack the fetus by their own locomotion through the perivascular lymph channels of the cord. The woman who has had repeated miscarriages, but who can not be proved to have syphilis, can sometimes produce a healthy child if antiluetic therapy is carried out during the pregnancy.

The history of syphilis is never a sufficient reason for performing an abortion or sterilization, because by the early and continuous treatment of the mother during pregnancy, congenital syphilis is largely preventable and, with the careful periodic observation of the child following birth, the infected infant can be recognized and will be quite amenable to cure. However, the habitually pregnant, luetic woman, who is lax in reporting for the treatment of herself and her offspring, is probably a candidate for sterilization.

In reality, multiple and properly controlled pregnancies seem to have a beneficial effect upon syphilis. This statement is based upon two reported observations: (1) that the multiparous luetic female is less liable to show late complications than the male or the woman who has never been pregnant, and (2) that the lesions in the female who contracts her disease during pregnancy, are usually milder in character when present or may be delayed in appearing until after delivery.

Unless early disease in the mother is present to demand that our first attention in therapy be for her future, the primary aim of treatment, in the pregnant syphilitic, is directed towards the

prevention or cure of such disease in her offspring. Here we might say that it also seems to be the safest procedure to treat the congenital syphilitic woman during her pregnancy. By the giving of antiluetic therapy to all gravid syphilitics, particularly when instituted in the first half of pregnancy, a high percentage of negative infants can be obtained. However, the outlook for a healthy child is improved if these mothers have also had treatment prior to this conception. Since the maximum spirocheticidal effect is being sought for the baby, our chief reliance is to be in the arsenicals, and, except when a history of heart, liver, renal or arteriosclerotic disease or drug intolerances exist in the mother, no special treatment of special complications of her disease are to be undertaken during the pregnancy. Our chance for a viable normal child rises in direct ratio to the time allowed for the giving of a greater total arsphenamine quantity to the mother during pregnancy. This is further enhanced if, in addition, a heavy metal series is permitted. In any event, the last month of pregnancy is to be held to the arsenicals and some have suggested that, if the pregnant syphilitic is only found in the last trimester, we are to use weekly arsphenamine injections combined with heavy metals. Thus, it is apparent that dose size is not to be decreased below the accepted therapeutic adult female dose, that the weekly interval between injections is not to be lengthened, and that treatment is to be carried right up to delivery. Mild treatment reactions are not to be over-evaluated, because, by sacrificing treatment in the mother, we may sacrifice result in the child. However, we must remember that we are treating an individual rather than an abstract disease and for that reason attention must be paid to the sclera, urine and blood pressure for signs of hepatic or renal damage and to the symptoms of pruritus or dermatitis which may indicate an impending grave intolerance. The belief that arsphenamine may produce early abortion is probably not warranted, but, though the drug's benefit justifies the occasional danger, it may sometimes precipitate premature birth. It is when we see these women during pregnancy that the opportunity is afforded for urging them to continue treatment post-partum if their treatment has not been adequate, to reinstitute therapy in succeeding pregnancies, and to continue each of their offspring for observation.

Through the courtesy of the Obstetrical Department of Indiana University, it has been my good fortune to conduct a special clinic for the care of syphilis in the pregnant woman, at the William H. Coleman Hospital. The treatment plan that we follow varies somewhat with the stage of the pregnancy at which the woman presents herself, but roughly conforms to the following scheme: (1) first to third month—two grains of an insoluble bismuth weekly; (2) third to fifth month—0.3 to 0.45 grams of neoarsphenamine

weekly with dose varying with patient's non-pregnant weight; (3) fifth to seventh month—a return to bismuth; (4) seventh to ninth month—a return to neoarsphenamine. This schedule permits the last two months to be on arsphenamine and, by introducing all the heavy metal prior to the seventh month, we seek to avoid any irritation by it on the kidney, which is then carrying the heaviest load in the whole pregnancy period.

The mother, following delivery, routinely has spinal puncture, if no previous evidence of its negativity exists, and the question of the necessity of her continuance of treatment decided and advice given accordingly.

The infants born of these mothers present also a variety of problems and they are neither to be placed upon routine treatment because the mother is diseased nor are short prophylactic series to be practiced upon them. If the mother has been in early syphilis just prior to or during the pregnancy, the child is routinely started on treatment immediately after birth and held from the breast. In all other infants, treatment is withheld until an absolute diagnosis is established. If the infant is infected, a careful watch of the child in the first few months of life usually will reveal the presence of the disease, though these searches in the unproved must be continued up to the second year. A statement and evaluation of the points to be considered in their check-up follows:

(1) *Blood Serologies.* A positive cord or venous Wassermann, made during the first two weeks of life, suggests simply that the infant must be watched closely, but it is not a positive evidence of infection. On the other hand, negativity of either of these does not prove the absence of the disease in the child under suspicion. It has been our opportunity to watch several infants who showed positive cord or early Wassermanns—who shortly, without treatment, gave negative results. These we chose to designate as showing a syphilitoxemia—that is a transfer of a positive blood reaction from the mother without the actual transfer of the disease. Serologies in the suspicioned child must be repeated every week or so in the first half year and then every few months up to the second year of life.

(2) *Cord darkfield.* A finding of spirochetes in the scrapings from the umbilical vein intima is a definite evidence of lues and treatment of that child should be instituted.

(3) *Placental Study.* A histological diagnosis of syphilis in this structure is difficult. Changes suggesting lues are not to be regarded as definite evidence, but are to be evaluated with other findings.

(4) *X-ray of Long Bones.* Reports show a high incidence of syphilitic bone findings, such as osteochondritis, saw-tooth metaphysis, osteomyelitis, and periostitis in the infants that are infected. Evidences of such findings usually are present at birth, in the first few weeks, or in the period up

to the fifth month. Their presence has been generally regarded as a positive evidence of infection and satisfactory grounds for beginning treatment. However, in a study reported with Dr. F. W. Gregor,<sup>1</sup> three infants showed osteochondritic findings which apparently healed without treatment and without any collateral evidences of the development of lues.

(5) *Physical Check-ups.* These are to be performed every week or so in the first few months and continued periodically up to the second year. Early findings of papular, squamous, annulo-papular and bullous eruptions, snuffles, keystone face, hydrocephalus, and Parrot's pseudoparalysis are points definitely indicating or suggesting infection in the infant. The symptom of undue irritability upon moving the child should suggest an x-ray of the long bones. The occurrence of pneumonia or convulsions in these infants is at least suggestive. The importance once attached to enlargement of the spleen is now questioned.

725 HUME MANSUR BLDG.

## DISCUSSION

F. R. N. CARTER, M.D. (South Bend): In my opinion, the control of congenital syphilis is definitely a problem of preventive medicine. Statistics bear out the fact that it is possible to prohibit congenital syphilis in practically 100% of all cases if only meager treatment is provided for the expectant mother.

To go to the source of the disease has always been the effort of the medical fraternity. Stokes, in his memorable textbook on syphilis, makes the interesting statement that the responsibility for syphilis in marriage can be squarely placed upon antemarital sexual exposure of young men, and he points directly to the treatment and suppression of the prostitute and to the education of young men as the fundamental form of attack on this problem.

Fournier found that 67% of the 208 married women were infected by men who acquired the disease before marriage; Blaisdel found 79%, and Solomon 76%. Fournier's second analysis showed that 75% of his syphilitic married women acquired the disease from their husbands. The Solomons, from a critical examination of their experience, estimate that 80% to 90% of sexual exposure in men is antemarital and that this is the source of familial infection.

The existence of congenital syphilis is partly a reflection upon the efficacy of preventive medicine, but the responsibility for its continued presence rests even more upon the influences of prejudice and prudery which have prevented the free dissemination of facts relative to its causation and prevention to the public at large. Such knowledge in the hands of every man and woman of repro-

<sup>1</sup> Report presented before the American Dermatological Society in June, 1936, to be published in the *Archives of Dermatology and Syphilology*.

ductive age will ultimately enable us to commit this disease to the limbo of conquered plagues that have harried mankind in ages past.

The prophylaxis of syphilis in men before marriage, therefore, becomes one of the first considerations in an educational program designed to eliminate congenital syphilis. It is equally important that every woman, regardless of her station in life, should be given a Wassermann test early in her period of gestation. The fact that congenital syphilis responds infinitely better if treatments are instituted in the first four or five months of gestation makes this an outstanding reason why diagnosis should be made earlier.

For a number of years it has been my personal feeling that the law of privileged communication prohibited a physician from reporting a positive syphilitic case to the state. This viewpoint, I think, should be relegated to oblivion. The good of the entire community, as well as the mate whom the infected individual will eventually marry, is reason enough for the state to take a hand in the control of syphilitic infection.

From the time of my entrance into medical school, the law of privileged communication has been pounded into my mind. No doctor is allowed to reveal what his patient has told him and yet this relationship between physician and patient is continually broken. It would be criminal, in the eyes of the public at large, for a physician to fail to report a case of diphtheria or infantile paralysis. However, every time a report of this nature is made to the state, the law is broken. A recent decision has sent a doctor to prison for a long term for failing to report the fact that he had given professional attention to a notorious criminal in his office. For the good of the masses the individual must give up certain privileges.

Already it is statutory that every doctor must report cases of syphilis. This law is subject to flagrant violation. It is my opinion that the law of privileged communication is responsible for these violations.

The experience of the Scandinavian countries, where syphilis is reported immediately to the government, seems to me to be the broadest stroke in the control of this infection.

Dr. Thomas Parran has called the attention of the reading public to the importance of the control of syphilitic infection. There need no longer be any cases of congenital syphilis if the medical profession will function with the knowledge which they already possess.

Information concerning the physician's taxes under the old age pension plan of the Social Security Act may be found on page 652.

## PSYCHIATRY IN GENERAL PRACTICE\*

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The purpose in presenting this subject is not to "oversell" psychiatry nor to conclude that the cure for the physical and mental ills of humanity lies in the hands of psychiatrists, but to focus the attention of the general practitioner upon the increasingly urgent need for acquiring a knowledge of elementary principles of psychiatry and their application to the practice of medicine. While we appreciate the fact that in the past there has been considerable discussion and interchange of opinions on this very topic, in expressing our views we feel justified in pouring old wine into new bottles, so to speak.

It is discouraging but true that of all the various specialties the average physician knows least about psychiatry and, unfortunately, he fails to recognize the psychiatric implications of his diagnostic difficulties. Psychiatry is not to be accepted as an isolated branch of the medical profession, and to assume that it deals primarily with insanity is a tragic misconception.

It is estimated that in forty per cent of the average clinical material there is some psychiatric problem. This alone is sufficient reason why all physicians in a clinical study of their cases should cultivate intelligent insight into each patient's personality make-up, so as to evaluate properly his subjective symptoms and thereby differentiate between organic and psychogenic disturbances.

A review of medical literature and recent statistical data will convince the medical practitioner beyond all doubt of the fundamental importance of coordinating psychiatry with general medicine.

From an abstract in the Yearbook of Mental and Nervous Disease, regarding the evolution of psychiatry, N. M. Owensby states that "Mental disease is as old as the human race and its earliest history is that of disease in general. In 860 B. C. the mentally ill were cared for in the Temples of Saturn in Egypt. In America in 1768 Virginia opened the first hospital to be used exclusively for the mentally ill. Since then there has been marked progress in the care of these individuals, but despite the wonderful strides made in psychiatry and the ever-increasing number of modern hospitals being erected for this type of illness, there are over 500,000 psychotic patients in private institutions, homes or walking the streets, waiting for care. Psychiatry has progressed more in the twentieth century than in all of the other centuries together. The activities are becoming more widespread each year and many valuable investigations are constantly being conducted to im-

\* Read before the Grant County Medical Society, Marion, Indiana, September 24, 1936.

prove our knowledge of this subject as well as to prevent the tremendous toll being taken from our population each year by the ravages of mental illnesses. The future progress of scientific medicine and the health and happiness of the generations to come depend upon mental medicine. There should be greater cooperation between members of the medical profession and psychiatrists resulting in a better understanding of psychiatry, in order that posterity may benefit."

How many members of the profession realize that over one-third of the problems of general medicine can be listed under the psychoneuroses, that approximately \$150,000,000 per year is spent in the treatment of these conditions, that almost half of the hospital beds in the United States are occupied by mental cases, that in the past several decades the number of insane in institutions has been increasing at a faster rate than the general population, that sickness surveys made by the Metropolitan Insurance Company show that nervous and mental disease constitute the second most important cause of disability and, finally, that statistics also show that one child in each group of twenty boys and girls now fifteen years old will be sent at some time during his or her life to a hospital for mental disease to spend on the average of over seven years there. A group of English statisticians went so far as to give the British Academy of Medicine a report which said, in substance, that "If mental disorders continued to increase at the present rate, the last spark of sanity would die out of the civilized world in the year 2139."

These are startling truths which stimulate the attention and curiosity of the laity, and they are a serious challenge to our profession. It is the combined responsibility of the psychiatrist and general practitioner, as well as a moral obligation to society, to reduce the admission rate to state hospitals. This can be accomplished only through the establishment of a closer rapport between psychiatry and general medicine.

It has been said that the personality of the physician is a quality which it would be hard to estimate in its far-reaching effect upon the patient. The economic and professional success of a practitioner to a large extent depends upon his ability to establish, psychoanalytically speaking, a "transference" or a psychological relationship of confidence between himself and his patient. In addition to acquiring a good knowledge of general medicine he must learn to cultivate a sympathetic and understanding personality in order to appreciate and up-root the underlying factors of human nature that are etiologically responsible for the chronicity of his patients' symptoms. Through elementary psychiatry the average physician can gain a deeper insight into his own make-up and adaptability for the medical profession, increase his feeling of self-confidence, and earn for himself the enviable prestige of his community, a most valuable asset, secondary of course, to his knowledge of medicine.

It is these very personality attributes that have helped to glorify the beloved country doctor. One can only discover by method of trial and experience the value of constantly applying ordinary principles of psychology, a sister-science of psychiatry, as an adjunct in the treatment of psychosomatic ailments, encountered so frequently in general practice.

The prognosis and recovery of every patient is directly dependent upon the diagnosis and therapeutic management he receives from his physician. Organic pathology produces definite mental reactions. The development of a neurosis or a psychosis depends upon the type and degree of reaction or personality-change produced by an organic disease or maladjustment to a situation.

No diagnosis may be considered accurate without an adequate psychiatric appreciation of the patient's personality. This means, as Karl Menninger expresses it, "a study of the individual as a whole, his height, his weight, his loves and hates, blood pressure and reflexes, his smiles and hopes, bowed legs and enlarged tonsils. It means all that one is and all that he is trying to become."

Mind and body cannot be considered separate entities. To understand one, you must have a knowledge of the other. The physician should learn to differentiate symptoms psychic in origin from those having an organic basis. He must be able to discriminate between a neurotic and a malingerer. As a wise British doctor said: "When a man is so ill as to think he is ill when he is not ill at all, then he is very ill indeed." He should be able to diagnose a neurosis from a psychosis. The psychotic creates for himself a world of phantasy, while the neurotic glories in his world of reality. It has been claimed that the more highly developed personalities tend to react neurotically while the more primitive react psychotically. Theoretically speaking, a neurosis is almost as prevalent as the common ordinary cold, to the extent that some authorities believe every one of us has neurotic tendencies, varying in degree of intensity, which become abnormally exaggerated according to our susceptibility to frustrations. People suffering from a so-called "nervous breakdown" are those individuals whose personalities have failed to make a satisfactory adjustment to a painful situation. Regarding the incidence of such nervous disorders, Dr. William J. Mayo said that "Neurasthenia, psychasthenia, hysteria and allied neuroses are the causes of more misery than cancer and tuberculosis."

Time and space do not permit us to go into the diagnostic symptomatology of the various mental disorders. Such conditions as hysteria, neurasthenia, anxiety neuroses, neurosyphilis, traumatic psychoses, middle aged depressions, senility, constitutional psychopathic states, drug addiction, alcoholism, impotency, frigidity, menopausal changes are only a few of the many mental and nervous

manifestations encountered in private practice, requiring a so-called psychological approach.

Considerable truth may be found in the statement that "Cures often fail because doctors think more in terms of medicine and surgery than in curing the mental states of their patients." Mac Fie Campbell advises the general practitioner "to look upon his patient as an individual in need of help and his patient's symptoms as a biologic problem resulting from his particular adaptation to his social environment." To practice medicine scientifically it is essential to uncover and expose for analysis any precipitating factor that might be responsible for the onset of a physical or mental illness, such factors as financial reverses, economic insecurity, marital and family dissension, psychosexual maladjustments, phobias, and obsessions, social inadequacy, situation-frustrations and the ordinary stress and strain of modern day living. The physician should then make it his moral obligation to give his sympathetic understanding to the analysis of each human problem and assist his patient through suggestion, encouragement, rationalization and re-education, to meet his difficulties successfully, as well as to improve his general attitude towards life. This latter form of treatment, known as psychotherapy, requires no special technic, but can be incorporated into practice in the form of "scientifically controlled friendship."

Through psychomedotherapy, assuming the license to coin such an expression, the physician becomes psychiatrically-minded and supplements his medicinal prescriptions with some form of psychotherapy. In other words he attempts to treat the mind as well as the disease. "Mens sana in corpore sano" should be the therapeutic desideratum of every physician.

#### SUMMARY

1. Psychiatry is not an isolated specialty but a part of every branch of medicine.

2. Almost half of the patients examined by general practitioners present some manifestation of a mental or nervous disorder.

3. Over one-third of the problems of general medicine can be listed under the psychoneuroses. They constitute the pill-taking addicts, enemacrankers, sympathy-craving dyspeptics and the gullible victims of cure-all nostrums who sell their photographs to quacks for testimonial purposes.

4. Statistics show that one out of every twenty will be confined at some time or other to a mental hospital.

5. The physician should make an honest effort to psycho-analyze himself in an endeavor to improve his adaptability for his profession and acquire the psychological ability to establish mutual confidence between himself and his patients.

6. He should learn to differentiate between organic and psychic disturbances.

7. He should recognize the psychiatric factors which tend to precipitate the onset of many mental

and nervous diseases, such as exaggerated character traits, depersonalization episodes, pre-psychotic behavior, personality anomalies and anti-social reactions, and recommend institutionalization, if indicated.

8. He should strive to gain the good will and confidence of his patients, make each patient a friend, and combine his medicinal or surgical therapy with some form of psychological encouragement.

9. The income of physicians fluctuates according to their ability to establish a professional relationship of faith and friendship between themselves and their patients.

10. The average practitioner of medicine should realize that such factors as financial reverses, feelings of economic insecurity, marital and family dissensions, and psychosexual maladaptations act as foreign bodies to the mind, causing mental abscesses. Having the patient unload, via the process of mental catharsis, the burden of those difficulties causing him undue anxiety and tension, subjecting the patient's problem to a partial analysis, and elevating the patient's spiritual morale, constitutes the incision and drainage of these mental abscesses.

11. The physician should remember to treat the patient as well as the disease.

12. Adequate treatment of neurosyphilis will at least delay if not prevent the onset of paresis.

13. The mental health challenge to medicine is the combined responsibility of the general practitioner and psychiatrist. Only through their united efforts can the admission rate to state hospitals be reduced.

14. The League of Nations and World Court have failed to establish an Utopia of World-Peace. Pacifists should be made to realize that the evolution of universal peace must grow from a single unit of civilization, namely, man, before we can expect peace between nations. The cooperation of every member of the medical profession, regardless of branch of service, race, color, or creed, should be enlisted in the international mental hygiene movement towards the prevention of such civil strife as now exists in Europe. "More than a fair share of the ills of the world arise from circumstances which might be avoided through fuller understanding by man of his own psychology and mental outlook."

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## THE ACUTE MASTOID\*

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Crawfordsville

Hundreds of cases of acute otitis media develop each year in Indiana and approximately ten per cent of them develop into mastoiditis. Out of the many cases which develop into mastoiditis, a rather large per cent will clear up either with or without surgery, a few will develop thrombosis of the lateral sinus, there will be a few cases of meningitis, a few brain abscesses, and many will have chronically discharging ears. Into which of these groups the case will fall depends very largely upon the skill, experience, and judgment of the physician in charge.

It is generally agreed that the usual route of infection of the mastoid is through the eustachian tube, following a cold in the head, grippe, influenza, tonsillitis, or one of the acute exanthematous diseases. Every involvement of the middle ear means a potential involvement of the mastoid cells, because the two are connected by the antrum just as an open door connects two rooms.

The infection is thought to spread by way of the many thin-walled blood vessels which are found in the subepithelial areolar tissue of the mucous membrane which lines the structures involved.

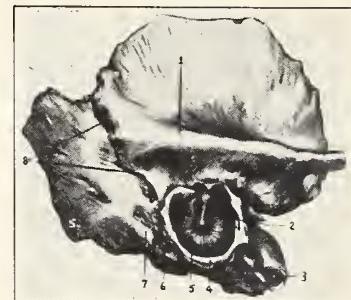
Just why some cases develop mastoiditis and others do not, both having similar care, is not always understood. It is probably due to the difference in anatomy, in the resistance of the patients, and in the virulence of the infective organisms.

So-called primary cases of mastoiditis, or cases apparently not involving the middle ear or ear drum, do occur, but they are rare and will not be discussed in this paper.

### ANATOMY

Briefly, the anatomy concerned in acute mastoiditis is: first, the eustachian tube, which connects the middle ear with the throat; second, the middle ear, or tympanic cavity, which contains the malleus, incus, and stapes, and which has for its external wall the tympanic membrane. The upper part of the tympanic cavity is called the attic which leads through a small door called the aditus ad antrum. This rather large cavity connects posteriorly with the mastoid cells, the number and size of which vary enormously in different individuals.

Three types of mastoid processes are usually described. (1) The pneumatic type, in which the cells are large and extensive and the cortex thin, which favors early perforation, especially in children. (2) The diploic type, characterized by numerous small cells; the cortex is thicker and,



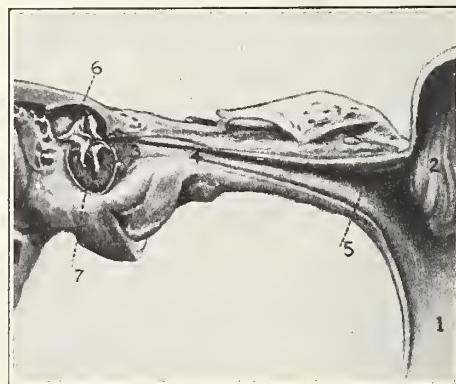
*Fig. 1. Temporal Bone of Infant, Showing Drum-Head. (1) Squamous bone over tympanomastoid antrum; (2) malleus; (3) carotid artery; (4) tympanic ring; (5) drum head; (6) foramen of exit for facial nerve; (7) rudimentary mastoid process; (8) ununited squamous mastoidal suture.*

therefore, does not as readily present localizing symptoms of mastoid disease, such as tenderness and swelling. (3) The sclerotic type, characterized by a very thick cortex; the cells may be totally obliterated. This type is found usually in cases of chronic mastoid infection beginning in childhood.

Attention should be called to the folds of mucous membrane which are found in the tympanic cavity around the ossicles and in the attic. These divide the cavity into pouches or pockets and are of considerable importance in the development of mastoid infection because they interfere with drainage.

The mastoid process in infancy is quite rudimentary, the cortex thin, and the antrum correspondingly superficial and higher up than in adults. The temporal bone is easily separated into its component parts, the petrous, tympanic and squamous. The sutures are poorly united. This explains the frequency of post-auricular swelling and abscess in infants. Very few mastoid cells are found before two years, and they do not approach the adult type until four or five years, reaching full size at about puberty.

A knowledge of the bacteriology of mastoid infection is important, although few surgeons make routine bacteriological studies. *Streptococcus hemolyticus* is usually suspected when we see a rapidly



*Fig. 2. Middle Ear, Eustachian Tube and Nasopharynx. (1) Pharynx; (2) adenoid; (3) tympanic orifice of eustachian tube; (4) isthmus of tube; (5) wide pharyngeal orifice; (6) tympanic attic and ossicles; (7) membrana tympani.*

\* Presented before the Section on Ophthalmology and Otolaryngology at the South Bend meeting of the Indiana State Medical Association, October 7, 1936.

developing anemia, severe prostration and septic temperature. The bacillus mucosus capsulatus is the most insidious and one of the most destructive organisms with which we have to deal. There is usually absence of pain and tenderness, normal pulse and temperature, and a discharge persisting for a period of four or more weeks. If the mucosus capsulatus is found to be the predominant organism in the discharge, operation should be performed.

The diagnosis of acute mastoiditis is usually not difficult when there is a history of a cold in the head, followed by ear ache, persistent fever, and profuse discharge over a period of two or more weeks. In addition there may be some headache, a feeling of heaviness or dullness over the infected side, sagging or narrowing of the canal wall, insomnia, and tenderness on pressure over the mastoid antrum or tip.

S. Macuen Smith<sup>1</sup> considers "the continuing of fever accompanying the suppurative otitis media, especially if the discharge is abundant, as a grave sign and an urgent indication for operation. This, however," according to Smith, "does not negative the existence of surgical mastoiditis in the presence of normal temperature and free otorrhea."

Surgical mastoiditis is present when a copious, purulent discharge is present at the end of four or five weeks even though not accompanied by pain, fever, or other local symptoms.

The management of these cases can be stated briefly: In the early stages the treatment is the same as for acute otitis media, that is, rest in bed, free catharsis, promotion of drainage through the eustachian tube by means of nose drops of one per cent ephedrine in normal salt. Free drainage from the ear should be maintained by free, and repeated, if necessary, incisions of the ear drum, and by frequent irrigations with hot boric acid solution containing a little alcohol. Some writers advocate the use of mild suction, but I have not tried this. Inflation of the ears is usually not advisable.

The question of early or late operation is a debatable one. Some men advocate early operation even before symptoms of mastoiditis have developed. Others advise waiting four or five weeks. This subject is discussed fully in an article by V. V. Wood<sup>2</sup> in which he states, "Mild average cases, showing no alarming symptoms or indications of extreme virulence should certainly not be rushed to the operating room. It is only the frantic effort to prevent fatal complications in the fulminant type of case that leads to hasty surgery." Mastoiditis is not like appendicitis in that patients need not be rushed to the operating room for fear of rupture.

Wood states that there should be some definite time for designating the onset of the disease, in

order that we all may be talking about the same thing. The onset of the mastoid infection itself is usually so insidious that it is difficult to determine the exact date of onset. On the other hand, the onset of otitis media is usually definite with pain and, according to Wood, that is the best time for designating the onset of the disease.

Mastoidectomy done within one week or less after the onset of ear ache is extremely early. Wood states: "There seems to be fairly general agreement that early operation is followed by a longer and more stormy convalescence, and slower healing of the wound. As a general rule, such a course results in more severe constitutional reactions and higher post operative temperature."

After the patient has recovered from the acute part of his illness, his fever has subsided somewhat, the disease process in the mastoid has become localized, the body has had time to manufacture immune bodies. This seems to me to be the ideal time for operation. I can see no advantage in postponing the agony any longer. By not waiting too long, much suffering can be prevented and valuable time can be saved. While no hard and fast rule can be laid as to the exact time for operation, I should say that in the average case some time during the third week following the onset of ear ache is probably the best. After all, it comes down to a matter of experience and judgment on the part of the surgeon in taking all the facts of the case into consideration.

In general, it may be said that it is safer to wait longer in infants and children than in adults. Patients giving a history of previous attacks should be operated sooner than others.

The x-ray picture can be of help in determining the time of operation. If the cell walls are found to be thin, necrosis is apt to develop faster and operation should be performed earlier. If the necrotic process is found to involve the wall of the lateral sinus, operation should not be delayed.

A very complete discussion of the value of the Schilling hemogram in acute mastoiditis is given by Alden and De Motte.<sup>3</sup> In this article they state that the blood picture in which the daily percentage of "staff" or band cells is determined is of great value in estimating the severity of the disease. They quote from Kopetzky as follows: "Where a mastoiditis is presented and one is in doubt as to whether to operate or not, the staff cells will furnish an excellent guide in helping one to reach a decision. Where the staff cells increase in number on several daily examinations and reach 12 per cent or more, operation is indicated. On the other hand, where the percentage of staff forms remain stationary below 12 per cent or show a gradual reduction, operation can be postponed with safety and the patient kept under further observation."

<sup>1</sup> Smith, S. Macuen: Unusual Types of Mastoiditis with Presentation of Patients. *Ann. Otol., Rhin., Laryn.*, June, 1927.

<sup>2</sup> Wood, V. V.: Acute Mastoiditis—Early Operation or Delayed, *Ann. Otol., Rhin., and Laryn.*, March, 1933.

<sup>3</sup> Alden, Arthur M. and De Motte, John A.: The Value of the Schilling Hemogram in the Otolgic Infections. *Ann. Otol., Rhin., and Laryn.*, March, 1931.

The duration of time between the beginning of the ear ache and the development of definite mastoid symptoms is thought to govern the severity of the case. When the duration is short, operation should be performed earlier.

Some cases are complicated by blood in the urine which is an urgent indication for operation.

I am a firm believer in early aseptic incision of the ear drum, that is even before there is bulging, as a preventative measure of mastoiditis. I believe this tends to stop the process at the beginning. I cannot see where it does any harm and it may do a lot of good. I would not, however, incise a membrane that was only slightly reddened, when the patient has little fever and few symptoms. Phenol and glycerine drops or pack should be tried and the ear drum examined frequently. Incision of the drum membrane should be free and extend up into the membrana flaccida if it is swollen.

The importance of removal of tonsils and adenoids in children as a preventative measure cannot be overestimated. Many observers have found mastoiditis much more frequent in children where these structures are present than where they have been removed. The tonsils and adenoids can be removed at the time of the mastoid operation, if not previously done.

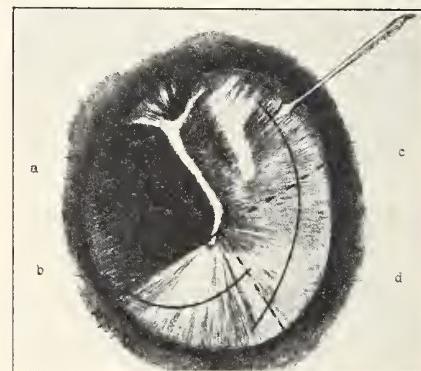
Acute mastoiditis is most frequently confused with furunculosis or boils in the auditory meatus. The author has more than once been called upon to operate a supposed case of mastoiditis and found upon examination a case of furunculosis. The differential diagnosis in most cases is easy. In furunculosis there is extreme pain on pulling or pressing on the cartilage of the ear and no pain on pressing upon the mastoid. The fever is not so high, there is little or no discharge, the drum membrane is intact, if it can be seen, and the hearing is not severely impaired.

The conservative treatment of acute mastoiditis has the advantage that many cases will clear up without operation. Dixon<sup>4</sup> says that: "Although conservative measures may occasionally lead the otologist into complications that might not have arisen had early surgical measures been applied, yet in the majority of cases, I believe that the conservative treatment offers many advantages over too early intervention."

On the other hand we find in Jackson and Coates<sup>5</sup> textbook that, "barring complications, an acute suppurative otitis media in children may exist four to six weeks without causing anxiety, but an extension of this time before resorting to mastoidectomy is dangerous, not only to its bearing on possible intracranial complications, but on the future audition of the individual." They state further that, "Although a few cases may recover,

the average one will develop an endocranial complication, or else interrupted resolution results in a chronic otorrhea. The great difficulty is to decide on the necessity of an operation after all the acute symptoms have subsided."

Roentgenograms are an invaluable aid in the diagnosis of mastoiditis. However, they should not be depended upon to the exclusion of all clinical findings. In an infection, as soon as the cells of the mastoid are filled with an exudate, roentgenograms will indicate that an infection is present. This does not mean that an operation should be performed at once, for many simple exudative processes in the mastoid cells will subside without



*Fig. 3. Incision (Paracentesis) of the Tympanic Membrane. The quadrants of the left tympanic membrane are shown: A, Anterosuperior quadrant; B, anteroinferior; C, posterosuperior; D, posteroinferior; the two most usual sites in which the ear drum is incised are shown. (From Bickham's "Operative Surgery," Vol. III. Courtesy of W. B. Saunders Company.)*

operative treatment. If the condition progresses to the extent that the roentgenograms show bone destruction and coalescence of cells, then operation should not be delayed further. Roentgenograms also will show the type and extent of the cells present, the location of the lateral sinus and the height of the tegmen tympani.

It is not possible in this paper to discuss fully the voluminous literature on mastoiditis in infants. Physicians should be aware, however, of the fact that mastoiditis or antritis is frequently associated with severe gastro-intestinal disturbances in infants. Marriott<sup>6</sup> believes that 85 per cent of all gastro-intestinal disease in infants is due to infections of the ear, nose and throat. According to Coates,<sup>7</sup> "All infants suffering with continual fever, loss of weight, dehydration, diarrhea, vomiting with no obvious cause, and failing to improve under general care, diet, transfusions, etc., should have a careful examination by a trained otologist." The changes to be looked for are: The drum membrane becomes grayish in color with loss of luster, there may be slight fullness or redness, particularly of

<sup>4</sup> Dixon, A. J.: Advantages of Conservative Treatment in Acute Mastoid Disease. *Surg., Gyn., and Obst.*, February, 1935.

<sup>5</sup> Jackson and Coates: The Nose, Throat, and Ear. W. B. Sanders Co., 1929.

<sup>6</sup> Marriott, McKim: Observations Concerning the Nature of Nutritional Disturbances. American Pediatric Society, May, 1925.

<sup>7</sup> Coates, Geo. M.: Mastoid Infection in the Infant. *Ann. of Otol., Rhin., and Laryn.*, December, 1927.

Shrapnell's membrane, and slight posterior-superior canal wall sagging. If myringotomy with free drainage fails to relieve the symptoms, drainage of the mastoid antrum under local anesthesia is indicated.

According to Samuel Cohen,<sup>8</sup> "The indications for opening the mastoid process can be divided into two groups—the imperative, in which, for the sake of the patient's life, the operation should not be postponed; and the doubtful, when the operation may be needed, yet waiting awhile is often good policy."

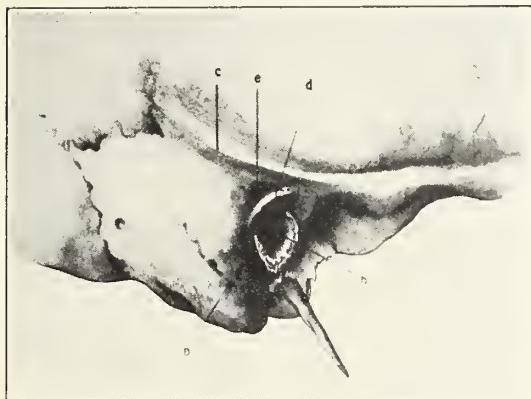


Fig. 4. Bony landmarks involved in mastoid operation. (Bickham's "Operative Surgery," Vol. III. Courtesy of W. B. Saunders Company.)

The imperative indications, according to Cohen are:

(1) "Fluctuation over the mastoid process, (providing some broken-down glands are not the cause of the fluctuation.)"

(2) "Intracranial complications, of which the suppurating ear is the probable source, such as meningitis, facial palsy, palsy of the external rectus, optic neuritis, etc."

(3) "Sagging of the posterior superior canal wall, combined with a rise in temperature which is not relieved on enlarging the drainage."

(4) "Pain in the head developing suddenly in the course of an acute ear suppuration, referred somewhere about the ear, and not relieved when the ear is drained by reopening the drumhead or stimulation of the eliminative processes."

(5) "The onset of the following symptoms during the course of an ear suppuration, with the ear as the probable cause: nausea, vertigo, chills, convulsions or drowsiness."

The doubtful indications, when operation should be considered but may be postponed, are:

(1) "Pain and tenderness over the mastoid antrum."

(2) "Continued profuse ear discharge for over a month."

(3) "Nipple-like protrusion in the posterior drum quadrant."

(4) "The blood picture of leukocytosis or an especially high polymorphonuclear count in the presence of an acute ear condition of several weeks' standing should make one wary."

(5) "A temperature rise coming on at the end of the second week following the onset of an ear discharge."

(6) "Roentgenograms are of especial value if taken at several-day intervals and the change noted."

(7) "Narrowing of the canal which causes an impediment to proper drainage due to a furuncular condition, complicating suppurative otitis media, etc."

(8) "A pulsating reflex at the point of perforation after the discharge has been present for several weeks."

(9) "The necessity for incision of the drum membrane several times because of too rapid closure followed by an increase of symptoms, such as fever, etc."

(10) "The presence of the streptococcus mucosus in the aural discharge."

(11) "Cessation of the discharge and onset of septic symptoms not rapidly relieved by reopening or enlarging the initial drumhead incision."

After operation is decided upon, it should be systematic and complete, paying particular attention to the tip and zygomatic cells. If this is done many secondary operations will be prevented. To shorten the period of ensuing complications, the postoperative period requires careful observation and treatment.

#### CONCLUSIONS

1. Acute mastoiditis is always a potentially serious disease from its inception and should be promptly recognized and efficiently handled.

2. Early aseptic myringotomy in otitis media will prevent many surgical mastoids.

3. Removal of tonsils and adenoid is a valuable preventative measure.

4. The ideal time for operation in the average case is some time during the third week following the onset of the ear ache.

5. An exudative mastoid infection may subside without operation.

6. The exact time for the operation must be determined by the surgeon with experience and judgment, taking into consideration the clinical, laboratory, and x-ray findings.

7. When operation is decided upon it should be complete and systematic.

#### DISCUSSION

L. L. NESBIT, M.D. (Anderson): The acute middle ear and mastoid infection is one of the most treacherous conditions a physician is called upon to treat. It is most common in early life, but no age is exempt. Because this condition is such a treacherous one these patients should have frequent examinations and careful attention. I have seen an ear drum ruptured and draining within

<sup>8</sup> Cohen, Samuel: Acute Purulent Otitis Media. *Penn. Med. Jr.*, October, 1928.

four hours after the onset of pain. While many mastoids can be prevented by early paracentesis and adequate drainage there are occasional cases that progress to a surgical mastoid in spite of everything that can be done. I refer to that type of rapid fulminating infection.

During my study of this paper several questions occurred to me both as to the handling of the acute ear infection and the prevention and care of the acute mastoid:

(1) When should paracentesis be performed?

Doctor Lingeman states that he believes in paracentesis even before there is bulging of the drum. He further states that he does not incise a membrane that is only slightly reddened with little fever and few symptoms. I feel that this is a conservative stand and commendable. It is perhaps better occasionally to open an ear unnecessarily than to take the risk of an abscess forming under pressure within the next few hours. The judgment of the surgeon may be at times taxed and in such cases I find it a good plan to re-examine the ear two or three hours later.

(2) Would not a bacteriological study of the discharge obtained from the ear at the time of paracentesis or on the first examination of an ear already draining be of considerable value?

Inasmuch as the great majority of mastoid infections are caused by streptococcus, the finding of this organism would place the surgeon upon his guard. However, one should remember that mastoiditis can result from other organisms and also that the laboratory technique is not infallible.

(3) Should hot packs or ice packs be employed on acute mastoids, and is either of any value?

It has been my custom to use ice packs on rapidly developing mastoids. I do not believe that the ice pack will prevent the infection but it does seem to slow the process and possibly allows the patient more time to develop anti-bodies. One must remember that continued ice packs may mask the symptoms of mastoid tenderness.

(4) When should the mastoid be x-rayed?

Where the matter of expense is not prohibitive, I believe that an x-ray should be made as soon as there is any indication of mastoid infection. I find it of value to repeat the x-ray from five to seven days later and compare the films. In a case where there is breakdown of bone in the second film, not shown in the first one, the patient should be operated, but if the second film shows no increased destruction, operation is deferred.

(5) In patients over three years of age should the surgeon study an x-ray of the mastoid before operating?

I feel that a good film and preferably a stereo of the mastoid is of great value to the surgeon. The size, location and position of cells is so variable in different people that a clear mental picture of the mastoid makes for more thorough mastoid surgery.

(6) Should the lateral sinus be exposed and examined at the time of operation even though

there is no evidence of thrombosis?

I do not believe that it is always necessary to uncover the lateral sinus but it most certainly should be done in questionable cases.

(7) Should the tonsils and adenoids be removed at the time of the mastoid operation, if not previously done?

There may be instances in which tonsillectomy and adenoidectomy are justified at the time of mastoidectomy. I have never done this and do not consider it advisable, especially in extremely sick patients. I look at the infected antrum differently. If an antrum is full of pus, I consider it advisable to wash it out and drain it if the pus is thick and drainage inadequate.

After reading Doctor Lingeman's paper, I reviewed the mastoid cases that I have operated since January 1st and should like briefly to report one of them as an illustration of the treacherous character of this disease.

On the fifth of last February I was called to the St. John's Hospital by Doctor Henry Gante and Doctor Rex Dixon to see a boy, eleven years of age. The child was delirious and having convulsions. Examination showed a normal left ear but the right ear drum was dusky in appearance. On questioning the father I learned that the boy had complained of pain in the right ear about two weeks previously. He had not noticed any drainage from the ear. Doctor Dixon had not been able to elicit mastoid tenderness. Under a gas anesthetic, Doctor Gante drew spinal fluid and I opened the right ear, obtaining two or three drops of pus. We x-rayed the mastoids and Doctor Tracy reported the deeper cells eroded and a perforation on the inner plate. These were the findings at operation. This case is of interest to me because of its atypical character. It represents the type of mastoid infection which is apt to be fatal and which we all fear.

L. W. DEAN, M.D. (St. Louis): Before discussing Dr. Lingeman's paper I want to say that I am enjoying this meeting very much. Every time I come to Indiana I get a lot of good from the papers and discussions by the ophthalmologists and otolaryngologists.

I was very much interested in this paper. The subject has been so thoroughly covered that discussion would be repetition. With your permission I am going to mention briefly three things:

One is the statement of Dr. Lingeman that patients who have had previous attacks of otitis should be operated immediately. Only recently have I noted something that has a bearing on this subject. We have just reviewed the sixty cases of thrombophlebitis of the lateral sinus that were treated in the Children's Hospital from 1920 to 1936. Twenty-seven per cent of the cases occurred early in the course of the otitis. In all these cases except one there was a history of recent repeated attacks of acute otitis. By that I mean attacks occurring in the last six months. In our minds

the early appearance of the infection in the sinus is due to changes in the mastoid produced by the recent previous attacks of acute otitis.

Now, second, as to the streptococcus mucosus capsulatus—about three years ago, in my presidential address before the American Otological Society, I stressed the great danger of brain complications in acute otitis media due to this organism. While I recommended then that the otitis should be treated in a conservative way, I expressed the opinion that the danger was much greater than in otitis due to other organisms. Since then in St. Louis we had an epidemic of acute otitis due to the streptococcus mucosus capsulatus. This occurred in the early winter. There were many fatalities. In late February and in March we had another epidemic due to this same organism. The cases of otitis then were very mild, and there were no serious results. I remember one physician who had an acute otitis due to the streptococcus mucosus capsulatus who did a part of his professional work every day. I am quite convinced that there is seasonal variation in the virulence of a given microorganism; that this seasonal variation is as important as the kind of organism causing the infection.

The third thing that I want to mention is that when in 1927 I stated that sinus suppuration had the same influence as acute otitis on producing dehydration and diarrhea in infants, many pediatricians stated that I was wrong. Today I am sure the same pediatricians would agree with me. So when an infant enters the hospital suffering from dehydration or diarrhea and he has also tonsillitis, acute sinusitis, and acute otitis, we have a very difficult problem. With this type of case we are very conservative in handling the infant. We try to maintain good drainage from sinuses and ears, pediatric treatment is carried out, and otherwise the babies are left entirely alone. In five or six days two of the otolaryngological conditions usually become less marked, and the third takes on additional clinical significance. In the course of time, if necessary, the otitis or the sinusitis, or the tonsillitis, whichever has assumed the greater clinical significance, is more actively attacked. These infants are not operated early in our service.

Five or six years ago we operated children with acute hemorrhagic nephritis and other systemic conditions much earlier than we do today. In acute hemorrhagic nephritis, mastoid operations were done so early that an unsatisfactory result was secured so far as the ear was concerned. All cases of hemorrhagic nephritis with acute mastoiditis do not need to have the mastoid operated. Some recover without the mastoid operation. Other cases of acute hemorrhagic nephritis enter a latent period and for two or three weeks they do not get any better or worse. Such patients need careful watching. The third group of patients with hemorrhagic nephritis become progressively worse, and it may be necessary to operate the mastoid, if in-

fected, sooner than we wish. We have, however, never operated such a patient until the non-protein nitrogen has been brought down to normal. In acute hemorrhagic nephritis, the blood vessels of the kidney are involved. There may be an involvement of blood vessels in other parts of the body resulting in hypertension. Some of these patients will not have their blood pressure return to normal until the streptococcal infection about the ear, nose, and throat has been eradicated. In all these cases we are inclined to be conservative. Only rarely do we operate an ear, nose, or throat with a systemic complication before the pediatrician has the systemic thing under control. We feel that it is safe only to operate such cases when we have the approval of the pediatrician for the operation.

JOHN R. FRANK, M.D. (Valparaiso): In regard to operating infants with acute mastoiditis, I would like to give this caution: In case there is an acute subperiosteal abscess, as often occurs, with the temperature high and the patient very sick, it is better to open and temporarily drain the abscess, and do the mastoid operation later when the patient has built up more resistance to the germ. If operated on in the acute period, the patient may die of septicemia or a nephritic complication.

In regard to the question of operation upon the aged and the use of heat or cold which Dr. Nesbit asked about, I will say that since in the aged person, the bone is very hard and the sutures united, we do not get the complications we do in children. In the case of a feeble man of 75 who had an acute mastoid, I put him to bed in the hospital for some four weeks and had him use a hot electric pad almost constantly. The ear drum was kept well open by repeated incisions and the middle ear cavity treated with 95% alcohol saturated with boric acid. Later, when the drainage had almost ceased, he used in the canal a pledget of cotton saturated with ether, with another dry piece of cotton over it to force the ether fumes into the ear and mastoid. The result was most satisfactory. The drum is now healed and shows only a slight inflammation. The mastoid is, of course, sclerotic. In the average acute case, use the ice pack until operation, but in an older person, heat can do no harm.

In the case of a sclerotic mastoid with foul discharge, before doing a radical, one should always try 6% iodine incorporated in boric acid powder. Do an ossiculectomy, if indicated, wash with alcohol and suck and clean out all debris. After drying out the ear, forcibly blow the iodine-boric powder in with a powder blower. We make an ounce of the boric iodine powder as follows:

Iodine Crystals, 1.8 gm.

Ether, 20 cc. (or enough to dissolve iodine).

Mix thoroughly with 1 ounce of boric acid pow-

der and after the ether has evaporated, keep in a dark, glass-stoppered bottle. Using this powder, I have had good success in cleaning up ears with foul discharge of many years duration.

**EUGENE L. BULSON, M.D. (Fort Wayne):** Dr. Lingeman has brought out some excellent points. First, the time for paracentesis. I, too, strongly believe that the ear drum, especially in children, should be incised as soon as it shows any redness, instead of waiting for bulging. I have seen any number of youngsters who were running fever, and the general man finds nothing wrong with them to account for it, and when the ears are examined, one may find one or both slightly inflamed, and when they are lanced, the condition clears up immediately.

After the ear drum is lanced, it has been my practice not to irrigate the ear as long as the ear is draining freely. I believe that more harm is done by irrigation, as long as drainage is free, than by not irrigating, and I instruct my patients to let the ear alone and to change the cotton in the meatus whenever it becomes soiled. When the discharge thickens and collects in the canal, I advise irrigation with an alkaline solution.

As to the value of x-rays, I think that x-rays should be taken in every case of acute mastoiditis or where we have symptoms of mastoid involvement. However, too much reliance should not be placed upon the x-ray pictures. A case that I had last spring illustrates this. The patient was brought in with a discharging ear which had been discharging for three or four days, and when I examined the patient, I found the drum reddened and a little granulation tissue protruding through the drum. I incised the drum and enlarged the opening. Some drainage was present from the middle ear cavity. On questioning the parents, I found that the boy had had a discharging ear off and on for several years. An x-ray of the mastoid was taken and the trabeculae all seemed to be intact; there was no evidence of fluid present, and except for a little clouding of the cells, the x-ray was essentially negative. However, the temperature remained elevated, and in view of the clinical symptoms, it was deemed advisable to open the mastoid in spite of the fact that the x-ray gave no positive findings. A mastoidectomy was performed, the trabeculae were found to be broken down, the cavity was full of necrotic and granulation tissue, a perisinuous abscess was present, and the entire mastoid cavity was destroyed. Too much dependence, therefore, should not be placed upon the x-ray.

**E. E. HOLLAND, M.D. (Richmond):** Speaking of age limits in mastoids, several years ago I had a patient brought to me, a man, aged ninety years. I never had a patient get well so quickly and nicely. This old gentleman cleared up very nicely and lived to die of apoplexy seven years later.

## ABSTRACTS

**OSCAR W. BETHEA, New Orleans (Journal A. M. A., Oct. 17, 1936):** states that the persistent tendency by the public to the use of purgative is largely the result of the influence of commercial advertising. Some of the possible disadvantages are well illustrated in the recent statistics from the Charity Hospital at New Orleans covering acute appendicitis. It was shown that, of those patients receiving no purgative before operation, one in every ninety-six died; of those who had taken a purgative before operation, one in every eleven died; of those who had been the victim of repeated purgation, one in every four died. Cathartics should not be used without definite indications. In the selection of a purgative agent, due attention should be given to the indications and contraindications presented by the particular patient. The United States Pharmacopoeia XI contains a variety of properly standardized cathartic drugs that will meet the therapeutic requirements in most if not all instances.

## NO SUBSTITUTE FOR A BRAIN

**Dr. LOUIS B. WILSON, Director of the Mayo Foundation, spoke to the Wayne County Medical Society members last Monday night on qualifications whereby a doctor conforming would be certified as a specialist.**

These qualifications are as follows: "In the statement of 'Essentials for Approved Special Examining Boards,' 'the special training' 'to be effective as far as practical not later than January 1, 1938,' is stated as: '(1) a period of study after the internship of not less than three years in approved clinics, dispensaries, hospitals, or laboratories, which period should include (a) intensive graduate training in anatomy, physiology, pathology and the other basic medical sciences which are necessary to the proper understanding of the specialty in question; (b) an active experience of not less than eighteen months in hospital clinics, dispensaries and diagnostic laboratories, and (c) examinations in the basic medical sciences of a specialty as well as in the clinical, laboratory, and public health aspects. (2) besides that period of three years of supervised training an additional period of not less than two years of study and/or practice is required.'"

With this ideal and idealistic purpose all will subscribe.

But how about the average medical student? How about the average boy who wishes to study medicine?

The high cost of undergraduate medical education now, today, almost makes it imperative that a boy wishing to study medicine come from a family with money. Does this mean that only the proper type of brain comes from a family of means?

Then after graduation from a medical school when nature and age emphatically urge matrimony, an ambitious doctor must put in three to five years in graduate training for a subsistence, something to eat and a place to sleep. Such a plan would establish a celibate aristocratic group of specialists without issue.

In the final analysis such a standard runs contrary to America's traditional freedom of opportunity for everyone.

Look around, doctor. The great men of today are great because of an inherent certain something, an extra endowment of brain, an unlimited capacity for work. Of course, everything being equal, the man with the longest training should be the best equipped doctor. You and I know men with ten and twelve years of institutional training, whose grand achievement in practice is an infinite appetite and capacity for alcoholic drinking.

Doctor, you know men who started in general practice who are the great men of our community.

Following Dr. Wilson's lead in his reference to Cook County Hospital, I do not wish to take the name of the Mayo Foundation in vain, but Will Mayo has done pretty well, and it is my understanding that he qualified himself as a specialist. He trained himself.

There is no substitute for brains.—DAVE SUGAR, *Detroit Medical News*, President's Page, October 12, 1936.

**THE JOURNAL**  
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DECEMBER, 1936

**EDITORIALS**

**ABOUT FACE—FORWARD MARCH!**

"ABOUT FACE—FORWARD MARCH!" would have been the command issued to the 165,000 American physicians if these 165,000 really had been an army and if the Board of Trustees of the American Medical Association had been the commanding voice of American medicine. Of course this really did not happen, nor could it have happened, for the 165,000 physicians of this nation are individualists and there is no commanding voice of medicine in America.

What really did happen was that at 4:00 p. m. on Monday afternoon, November 16, 1936, an armistice was informally pledged between the American Medical Association and the United States Public Health Service, and hereafter, instead of sparring around with each other, these two great groups are going to work in harmony in the interest of the public health and the public welfare in carrying out the provisions of the Social Security Act.

It all came about this way. For months the medical profession had been skeptical of just what was the attitude of Thomas Parran, the new Surgeon General of the United States Public Health Service, toward socialized medicine, and how far the Social Security Act and the Children's Bureau under the direction of its chief, Miss Katherine F. Lenroot, would push the medical profession toward socialized medicine. For months the profession voiced its skepticism and opposition in regard to the entire movement, and its voice was vehement, forceful and unceasing. Then came the election, and two weeks later the Annual Conference of Secretaries and Editors of the constituent state medical associations at the thoroughly modern and

well appointed headquarters offices of the American Medical Association in Chicago. Both Dr. Parran and Miss Lenroot addressed this conference at its first afternoon session, at two o'clock. Dr. Parran said, "I do not favor at this time any scheme of governmental practice in medicine. I do favor better resources to put tools into the hands of the profession; I do favor the prevention of disease as part of the duty of the health department." Miss Lenroot stated that physicians should receive remuneration for the care of crippled children under the provisions of the Social Security Act, and that the Federal Government has no rigid plan to which each state should adhere, but that each state should formulate its own plan.

Much more was said by both speakers, each of whom ended with a request that the profession of the country cooperate. Dr. Parran suggested that special committees be appointed in each state society to formulate a syphilis control program.

All this took about two hours, then the fateful hour arrived. Would the sentiment be expressed by the secretaries and editors to cooperate and go along, or would they continue under the aegis of the American Medical Association to criticize, buck, and stand pat against any and all things that had to do with the carrying out of the provisions of the Social Security Act? Would they spill the conference apple cart? They did not! There had been some smart diplomatic maneuvers behind the scenes and several important personages high in the affairs of the A.M.A., including Dr. J. H. J. Upham, president-elect of the A.M.A., took the floor and effectively molded the thoughts of conferees along the line of cooperation.

Before it was all over, up rose Dr. Olin West, secretary and general manager of the American Medical Association, that dependable hero of organized medicine—and never was he a more noble Roman than upon that particular occasion. He said in substance, though of course not in fact, that in his own humble opinion, all this distribution of federal funds was fantastic, and that he had told "Tom" Parran that he did not agree with the program. He did not say that he thought the whole thing was illusory, but the impression he left upon his listeners was just that. He said, further, that he hoped he never would see the day come when American medicine would be socialized, and that he was happy to know that Dr. Parran was not favoring such a program. In conclusion, Dr. West said that social security is here to stay, and whether we all like it or not, it is up to the medical profession to accept it as it is; and to help and cooperate with the officials to supply leadership in carrying out the health provisions of the Act.

Then came the zero hour—and the armistice! The conference unanimously went on record approving the suggestion of Dr. Parran that special committees be appointed by each state medical association to study, survey, and make suggestions in regard to a syphilis control program.

It must be understood that the provisions of this armistice and this back-tracking are not all on one side. The Washington officials have also done considerable "to the rear marching!" They are a lot smarter than they were four years ago when they said to organized medicine, "You take this program—or else!" They have come a long way. Now they ask for cooperation; they no longer demand it. They realize that no public health program, whether it be syphilis control or the care of the indigent, can succeed without the support and backing of the medical profession. When criticized by the Indiana representatives who attended the conference in regard to the health service survey that was made by the department in Terre Haute some time ago, without the knowledge of the medical profession, Dr. Martha Eliot and Miss Lenroot said, "We have learned our lesson. Nothing like that will be undertaken again without the knowledge of the medical profession."

From an Indiana standpoint, this about-face attitude of A.M.A. officialdom does not make much difference, for in this state cooperation between the State Medical Association and the State Department of Public Health is nothing new, as apparently it is in some states. In Indiana we have our liaison committees to work with the officials appointed to carry out both the child and maternal welfare features, and the crippled children provisions of the Social Security Act. The Indiana State Medical Association played an active part during the special session of its legislature, to see that the social workers were not put in full and unchecked control of the Act. Physicians are members on a number of county Social Security boards. There is a frank and most friendly feeling of true cooperation between the Indiana State Medical Association and Dr. Verne K. Harvey, director of the Indiana Division of Public Health. In fact, from what happened at Chicago two weeks ago, it is proved that the Indiana State Medical Association did the only thing that could properly have been done when it fell in line, adapted itself to the inevitable, and some months ago said: "About Face! And FORWARD MARCH!"

## THE PAROLE PROBLEM

The Indianapolis *News* in its October 19th issue editorialized on parole policies, basing its comment on a recent article in THE JOURNAL<sup>1</sup> in which Dr. Max Bahr recommended that "the disposition of all misdemeanants and felons be based upon the study of the individual offender by properly qualified and impartial experts cooperating with the courts." Dr. Bahr further recommended that "prisoners be discharged or released upon parole only after complete and competent psychiatric

examination with findings favorable for successful rehabilitation," and that "the incurably inadequate, incompetent and anti-social offenders be interned permanently, without regard to the particular offense committed."

Dr. Bahr is no newcomer in this particular field. For many years he has been a very important factor in Indiana and in national psychiatry. He has made a deep study of the mental attitudes of our criminal population, and his utterances are worthy of more than casual consideration. This question of penology is attracting more and more attention as time goes on, and it is right that the medical profession should assume its proper role in such discussions. The present parole system, as it is carried out in the average state, needs drastic overhauling. Too long have we allowed mawkish sentiment to over-balance our better judgment; too often have the gates of our penal institutions been set ajar for the release of this or that person into our social state. We do not need to refer to the Dillinger case to bolster this contention, for few Indiana counties fail to offer many glaring examples of this inconsistency.

As we understand it, the whole system of punishment is based upon a desire to correct the glaring faults of the offender, but just how this is to be done remains the question. To the average man who is sentenced to a penal institution, his first day therein would seem to be sufficient punishment, but in others such incarceration only breeds a complete disrespect for law and order. We do not feel that it is necessary for all of those committed for the heinous crime of murder to spend their days in prison (no doubt we will be censured for such an opinion). Many such crimes are committed in the heat of momentary passion, and a few years in the Michigan City prison would seem to suffice for the proper degree of reflection. It is the robber, the hold-up man and the gangster who should receive careful attention, for they are the ones who prey upon society and to whom parole means another opportunity to ply their former avocation.

The *News* strikes right at the heart of the present evil when it says that our criminal procedure will have to be overhauled ere we can expect a needed reform in our present system, and the *News* makes a ten-strike when it says, "During the last few years there has been a tendency in Indiana to staff our penal institutions with inexperienced executives and to give more attention to the theory of political rewards than to scientific study of individual cases." The answer, of course, is politics, that *thing* which has become the bane of better things in American life. Penology is recognized as a science that requires the better class of brains; our penal institutions should not be the political footballs that they seem to be at the present time.

The medical profession should become grossly interested in penology problems, for it is probable

<sup>1</sup> Report of the Committee on Expert Testimony, *The Journal of the Indiana State Medical Association*, Vol. 29, No. 9 (Sept.), 1936, p. 483.

that in the near future the medical profession will be asked to offer the solution to the many problems that now confront us in criminology. Dr. Max Bahr is to be congratulated for bringing this matter to the attention of the medical profession and to Indiana citizens as well.

## REDUCING AGENTS

Just where the propaganda for the slim, svelte figure in women originated, we do not know, but the fact is that Dame Fashion some time ago forbade "hips" and all that goes with them, and her devotees at once began a program of reducing which has continued until it has reached a status of absurdity. Diets became the vogue, making fashion-followers uncomfortable through the eschewal of the things they liked best to eat, and mostly those foods were Dame Nature's preferences for acceptable human consumption.

Probably it was only natural that the medical profession, in response to constantly increasing and oft-repeated requests, should seek remedial measures for overweight. Various drugs were used, and the proprietary remedies have become too numerous to mention. The daily press was filled with advertisements for this or that preparation, each guaranteed to produce the desired slim figure. Then along came dinitrophenol. It received favorable comment in several leading medical journals, and medical men began to prescribe it as the perfect reducing agent. After a few months, reports of unhappy experiences with the drug began to find their way into the medical press. Still later the after-effects of the use of this drug were noted, principally its effect upon the crystalline lens. Medical literature teemed with reports of cataract formation following the use of dinitrophenol, and there were several reports of a breaking-down of iris tissue. Several hundred cases of cataract directly traceable to dinitrophenol were reported, and physicians abandoned its use.

Recent developments indicate that some Indiana physicians are continuing to prescribe this dangerous drug, and one physician only a few days ago stated that he never had heard of any evil effects following the use of dinitrophenol!

The use of dinitrophenol has resulted in numerous malpractice suits and while we believe none has come to trial yet, malpractice insurance companies may find it necessary to attach riders to their policies, denying obligation in cases where dinitrophenol has been prescribed. However, the point at issue is not one of medical defense; it is rather a question of just how far some physicians will go in the field of therapy. With information as to the baneful effects of any drug readily available, we are at a complete loss to understand why any physician will tempt old lady Fate by con-

tinuing to use a drug which is universally condemned. Dinitrophenol is just one addition to the already long list of such remedial agents, and it should be accorded a proper niche in the limbo of forgotten things.

## THAT ANNUAL MEETING

Most of the county medical societies hold their annual meeting in December when officers for the ensuing year are elected. In some of our component societies, this election is approached with a great deal of consideration; in too many of them no thought is given to the matter until the meeting is assembled and nominations are called for. This latter condition should not exist, for it is a truism that the success of the county society is wholly dependent upon its officers. The simple fact that Doctor Blank has been a member for many years and is the "dean" of the profession in his community does not mean that he will make a good officer. It is vitally important that the very foundation of organized medicine, the county medical society, be efficiently manned. While we probably have passed through the worst of the present fight to maintain our profession as an entity, no one can foretell when we will again be assailed by the Utopian dreamer who has little or no regard for anything save the accomplishment of an idle fantasy.

*Every county medical society officer is a most important factor*, and the best man available should be named for each post. This is particularly true of the secretary, since it is he who must bear the brunt of the work; he is expected to man the ship, and all too often too much is heaped upon his shoulders. If the program committee for one reason or another falls down, the secretary is presumed to have a pinch-hitter in the batter's box, ready to go on signal. And woe be unto him who fails to get the meeting notices out on schedule, no matter how plausible may be his reason for delay!

The president of the county society is the directing head, and should be selected because of his interest in the society and his ability to carry on. In some of our larger groups, the president-elect system is in operation and this enables the incoming president to "learn the ropes."

There is one phase of the annual election that receives little advance consideration, that of the election of the delegate or delegates to the annual convention. Delegates are important officials and should be selected with great care. Less than one hundred of the nearly three thousand members of the Indiana State Medical Association constitute the House of Delegates, the law-making body of Indiana medicine. It is true that more than that number are elected, but some twenty or more per cent do not attend the convention. At the South Bend convention, a county society with a membership of nearly two hundred was represented by

only one of its four delegates, and that county was not more than two hours distant from South Bend!

One other suggestion—if you have a delegate who has been active for some years past, by all means keep him on the job; he deserves re-election. As a matter of fact, a delegate, like wine, improves with age.

Think these things over, and approach your annual county society election with a bit more thought, with the purpose of securing the best men available to handle the affairs of your society.

## THE NOVEMBER ELECTION

That quadrennial event known as the presidential campaign has come and gone, leaving in its wake a group of exhilarant celebrators on one side, and in the other camp a headache of national proportions. "The people" have spoken with stentorian voice; never in our memory has a major party put over such an overwhelming defeat of the opposition. The fact is that the losing party was nearly annihilated.

In Winchester a few days ago a railroad station agent advised us that Randolph County was the only county in the United States to be carried by the G.O.P. "Why," he said, "we are told that arrangements are being made to run special trains into our town, so that folks from other sections of the country may see what sort of folks we are up this way!"

The whys and wherefores leading up to the political debacle have not as yet been determined. Even the *Literary Digest*, which so zealously told its readers that the election was to be a landslide for the Republican Party, has not as yet come to any definite conclusion as to why its trusty poll fell down. Jim Farley who early in the game predicted that the opposition would not carry more than two of our forty-eight states most certainly did not have much faith in his expressed opinion. President Roosevelt did not anticipate such a result since he went out and made a campaign such as few second-termers ever have made. The fact seems to be that the great "silent vote" swung the election. In our county some thirty-five per cent of the regularly registered electorates failed to vote in the primaries; just why this should be is a conundrum to the old-timers in both major parties. As the campaign progressed, we observed that this non-primary vote was the key to the situation, and we now believe we were correct in our conclusion.

Now that it is all over, we can calmly ponder the prospects of the next four years. A current opinion seems to be that a newly elected President spends his first term in building his political fences, and that if he is re-elected, he settles down to business and gives his countrymen the best that is in him. Generally he makes changes in his official family; cabinet members are dropped, and men more suit-

able are named to the posts. While Franklin D. Roosevelt hasn't asked our opinion, we believe that a few cabinet changes are desirable.

The medical profession is deeply interested in what the political future will unfold. For some years we have been making a gallant fight against socialized medicine and against any form of regimentation of the profession. Occasionally we have been somewhat disturbed by rumors that certain advisors of the President have favored such things, but the President on more than one occasion has made it plain that he does not favor such drastic changes.

THE JOURNAL has refused consistently to be drawn into politics of any kind. We have been importuned to open up our guns in attacks upon this or defense of that, but to all such requests we have turned a deaf ear. We have refused open declarations for or against any candidate, and have been content to urge the medical profession to support those known to be favorable to the ideals of our profession.

We believe in majority rule; we believe that the American people are able to decide upon whom they want for their leaders, both state and national. The election has come and gone. We are "for" President Roosevelt and "for" Governor Townsend. They are our standard-bearers, and they have the right to expect the support of every worthwhile citizen.

## EDITORIAL NOTES

*Merry Christmas*

Secretaries have received receipt books for 1937 dues. Pay yours now!

President-elect of the American Medical Association, J. H. J. Upham, decries the tendency of some of our state associations to fill their annual conventions with papers from men outside the state. He properly reminds us that these are *state* meetings and that the local membership should have every opportunity to display its prowess. In like vein, we may say that the same thing is applicable to our local county medical societies. Too often do we call in the men from outside the county when we have local men with messages of importance. We commend this to our local program committees for their earnest consideration.

Christmas seals are again with us, and their distribution merits the support of the medical profession. These bits of artistic cheer have come to be an American institution. For years they have graced our correspondence and we have come to look for them in our December mail, mentally con-

gratulating those who make a practice of using them. Christmas seals do much to keep the public mind alert to the efforts being made to control what was once termed the great white plague. They have played an important part in bringing the anti-tuberculosis campaign to its present successful state. Physicians should not only use these seals themselves, but should advise patients to do likewise.

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This is a busy time for secretaries. They do not enjoy asking for dues; they are in no sense bill collectors. You can make your secretary's task a lighter and pleasanter one if you will pay your dues early.

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Another of our pet peeves is the matter of "bond" paper. Not many people seem to know that one of the highly advertised bond papers has not one bit of rag content, and rag content is the essential part of a bond paper. A printer has advised us that his craft has adopted a twenty-five per cent rag content as being a fairly good bond paper, and that the advertised brand aforementioned has been cast aside although many customers continue to call for it. The Federal Trade Commission might find a fertile field here.

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Twenty-seven million miles mean a lot of traveling. That figure represents the number of miles traveled by Indiana school buses in the past year, and *without injury to a single school child* other than a fractured clavicle sustained by one youngster who was thrown against a seat when a bus skidded a bit. Credit for this record is due to the Indiana Division of Public Health, for be it known that this department has charge of school buses, and sees to it that they are properly heated and ventilated, that their construction is of a standard sort, and that the drivers thereof are capable. All credit to such a record and to the department that makes such a record possible!

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Yeager and Smith, in *The Mayo Clinic Bulletin* for September 16, direct attention to the large number of cases of bromide delirium they are seeing. One case is reported in which the victim had been formally committed to a state hospital for the insane. This man, an alcoholic, had been taking huge doses of "Bromidia," a proprietary preparation which, incidentally, finds its way into the advertising pages of some of our medical magazines. This self-drugging with bromides is much more common than casually appears. A little check among our druggist friends reveals that they have many calls for various forms of bromides, though in more recent years the more mod-

ern sedatives seem to have the preference with the self-druggers. Just another example of the ease with which the lay public is enabled to obtain drugs that are potentially harmful.

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It looks as though 1936 may have a near approach to the Christmas of the pre-depression years, with the employment situation vastly improved and the millions of wage increases, not to mention the extra dividends distributed by many industrial concerns. We never have gotten too old to enjoy Christmas. Somehow it is different than any of the other holidays. It seems to mellow the most hardened. We have had "A Merry Christmas" from folk who hardly speak to us at any other time of the year, and such a greeting from them is as valuable as a tangible gift. Of course, the family with youngsters fares better than others at such a time, but Christmas is the Universal Holiday, and it strikes almost everybody in just about the same vein. And we wish all of our readers "A Merry Christmas"—and we mean it!

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Dr. William N. Wishard, Sr., told us a good story the other day. Seems that 'way back when, he was a pioneer in the G. U. field, and some of his cronies handed him the title of The Plumber. (Must have had something to do with drain pipes, we opine!) Well, shortly after the doctor and Mrs. Wishard were married, imagine their consternation upon returning from church, one Sunday morning, when they beheld across the front steps a sign bearing the legend, "Plumber." Later on in life they told the story to son Bill, who has since become a plumber, too. Recently the Wishards were traveling in the South, and upon entering St. Augustine, Florida, young Bill espied a sign over a business establishment which read "Wishard Plumbing Company." Of course, the car was immediately brought to a stop, and the Wishards went in to make the acquaintance of the proprietor, and that call resulted in a voluminous correspondence between St. Augustine and Indianapolis.

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After a considerable discussion of the question at the recent secretaries and editors' conference, a motion was unanimously adopted recommending that all state association medical journals take advantage of the Federal copyright law and, having thus done, see that the provisions of the law are enforced. This, of course, is intended to put a stop to the practice of the "throw-away" type of journals of lifting their material from reputable magazines. We believe that this is a step in the right direction, and hope that all publishers of medical

journals will take advantage of it at once. At the same time, we would suggest that members of our medical societies cease their contributions to these so-called journals, this including some three former presidents of the American Medical Association who in recent months have allowed their names to grace the pages of one of the "throw-away" periodicals. It would be interesting to know whether or not these "big shots" were paid at current rates for their contributions. The latest market price for such articles, as quoted personally to us by one such magazine, was twenty-five dollars!

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Considerable criticism was heard following the first meeting of the House of Delegates at South Bend regarding the time lost in the proceedings. Most delegates like action when the House is in session, but do not care to waste a lot of time over small matters. On excellent authority, we are advised that the matter of naming the reference committees occupied some forty-two minutes, when five minutes should have sufficed for that purpose. Again, in the presentation of reports, there is no good reason why one member should absorb twenty-two minutes in presenting a report, especially when the chair had announced that only five minutes would be allowed for the purpose. Reference committees, we believe, should be named well in advance of the convention, and the members of those committees should be notified. They should be advised to get in touch with the president if they cannot be present. With such a plan, it would be a matter of less than five minutes to announce these committees and arrange for their meetings. Other suggestions might be made for speeding up the business of the House, but the two mentioned will suffice to show the necessity of adopting some plan whereby the first session will not occupy more than two hours of time.

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Dr. John J. Moorehead, in addressing the New York Academy of Medicine, tells an interesting story of injuries, according to the *New York Times*. He says that about sixty per cent of injuries are due to travel, and that football is the most dangerous sport. Twenty per cent are due to industrial accidents, and ten per cent arise from the ordinary hazards of every day life. It should be borne in mind, however, that the sixty per cent figure attributed to travel should be analyzed and should not be charged to any one mode of transportation. Most of it, of course, is directly charged to automotive accidents. Actually, travel by train has come to be one of the safest methods of going places, since it is a matter of many, many months since a passenger on a train in this country has been killed. In concluding his talk, Dr. Moorehead said that motor accidents are becoming so common that every doctor should equip himself for

any emergency, so that victims can at least be given such first aid treatment as will guarantee their arrival at a hospital in as good condition as possible.

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Some time ago we directed attention to a new-fangled "health test" for babies which was being operated in northern Indiana, and suggested that physicians be a bit chary about participating in such a program. We are reminded of this again upon receipt of a newspaper clipping which detailed the plan of operation of the scheme in another Indiana city. The plan is to interest a local group in the enterprise, offering them either a flat sum or a commission. The mothers are told that the proceeds of an entertainment to be staged during the contest, and to which the mothers are asked to sell twenty or more tickets, will help pay the expenses of the contest, and as a further reward, the mother is entitled to have a picture of the child made at a local department store. Just why physicians lend themselves to propositions so wholly commercial is beyond us. It stands to reason that if the physicians of one community fall for the racket, it will be tried in other Indiana centers. Obviously the thing to do is to refuse to have anything to do with such schemes.

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Visitors to the headquarters of the American Medical Association at 535 North Dearborn Street in Chicago should be prepared for an agreeable surprise, especially those who are accustomed to the old building with its musty brick walls and generally drab exterior. The entire plant has been renovated and practically rebuilt and it now presents an architectural picture of which the 100,000 physician-members may well be proud. The dingy brick walls have been replaced with Indiana limestone, that imperishable building material which age serves only to beautify. Two full stories have been added to the building, aiding materially in the sense of proportion. The interior is strikingly altered. We were accustomed to visiting various officials in their dusty and musty little cubby holes; now one steps out of the elevator into a light, airy hallway, and into offices that are a credit to the officials of the greatest medical organization in the world. Many of our members have never visited headquarters, and to them we say by all means include such a visit on your next trip to Chicago. You will be cordially welcomed, and you will come away with an increased respect for your membership in the American Medical Association.

A recent report indicates that but 51% of the members of our Indiana State Medical Association are Fellows of the American Medical Association. While it is true that all members of state associations are members of the American Medical Association, Fellowship is limited to those who pay the parent organization the annual dues of seven dollars. This payment, by the way, brings to the Fellows the weekly *Journal of the American Medical Association*, universally credited as being the best medical magazine published. Comment occasionally is heard that the *Journal of the A.M.A.* is for the high-brows, and that the average general man is not interested in its contents. While it is true that the magazine does publish a large number of research articles, there is plenty of material of real interest for any physician. Further, it is a weekly cross-section of medicine of world-wide extent. The weekly letters from European medical centers teem with valuable matters of interest to most of us. The abstracts cover the medical field of the world. In all, *The Journal of the A.M.A.* is indispensable to any one in active practice, and we urge our readers who are not receiving it to make application for Fellowship at once.

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*Social Security pension taxes?*  
Read page 652.

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An editorial regarding the franking abuse has set us to thinking how often we have mentally commented on the marked increase this thing has had in our memory. Franking was originally intended to enable senators and representatives to answer their voluminous correspondence with as little cost as possible. The British government abolished franking privileges in 1840, and the United States discontinued the privilege in 1873 but partially restored it a few years later. Now it has become a veritable giant of profligacy. The editorial mentioned had to do with the franking of a little matter of *six million* pieces of campaign stuff—we almost said “literature”—by the party in power. It seems that the conservative limit has been stretched a bit, for our mails are cluttered with the utterances of this or that senator or representative, and we are sure that the majority of them never saw the light of day in Washington’s halls of legislation. We daresay that our postal rates could be materially reduced if this matter of franking were limited to legitimate purposes. And to what purpose is all this waste? With the press and the radio, Mr. John Public knows all about folk in Washington, he is wholly familiar with what is going on down there, and he needs none of the stuff that is sent out in the hope that

it may be enlightening! Let’s cut out the frank, or at least limit it to legitimate purposes, if any there be.

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Many of our contemporaries are noting the increasing number of shoes on the market which bear a name with “Doctor” appended to it. Only once have we had any personal experience with such a commodity, a glib salesman having sold us a shoe with the euphonious title of “The Doctor’s Shoe.” Experience proved that the shoe had no particular merit—it was just another shoe. No shoe can be designed to meet all requirements. Foot comfort is a greatly desired thing, but the present fad of ascribing this or that foot-gear to some doctor or to the medical profession in general is objectionable almost to the point of nausea and is quite comparable to radio’s advertising of proprietary remedies. The Canadian physician who treats almost everything by foot-rubbing seems to have become successful in the commercialization of a shoe which bears his name, and in all cities of considerable size, there are extensively advertised shoe stores, or shoe departments in general stores, which sell his wares. It is interesting to observe at this point that the Federal Trade Commission has promised an early investigation into the matter. Innumerable groups have purloined the title of “Doctor” and almost any individual can usurp the title without fear of punishment. What better reason could be found for the regular medical profession to drop this common title? When you have your stationery printed, when you sign your name, do not precede it with “Doctor” or the abbreviation “Dr.” but use the letters “M.D.” which you have earned the right to add to your name and which will immediately establish your proper status.

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A few weeks ago there died a man, a young man as ages go in these times, a man of such character and civic pride that his community could ill afford to lose him. He was more than a real friend of ours, he was a real “buddy”; we had played with him, fished with him, and knew his worth better than most folks; his passing leaves a big void in our life. He was a very successful business man, yet he always managed to find time to do things for the other fellow. He found time to organize leagues for baseball for the boys and young men of his community and he was similarly active in other sports. However, this man neglected the most important thing before him, that little matter of personal health. He was a perfect “set-up” for coronary disease, the disease that took him from us. Always willing to devote time and energy to the interests of the younger people in whom he was interested, he had little time for personal play.

When approached regarding a little trip in pursuit of the finny tribe, his stock remark was "Gee, I'd like to go, but I can't make it," and within the past six months he had denied himself such little trips on at least a half dozen occasions. Now he is gone. His community, his family, and his friends mourn his passing, and the youths of the town will seek long for such a loyal booster of young American manhood. Coronary disease has added another to its increasing number of victims, and the question presents itself: When will the American business man learn that, while a busy life is filled with its rewards, he should not forget the art of play? "I can't make it," has cost the lives of too many men such as our buddy.

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*Dues are due January first. Pay them now!*

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Some thirty-five years ago, a physician said to a young man, "This is a soft chancre; we will burn it out, and that will be the end of the thing." Today that man sought advice regarding a sudden diplopia, and examination revealed that he had other troubles: one foot dragged a bit, his orientation was not so good, and at times he was unable to express himself clearly. His blood and spinal fluid showed a very positive Wassermann, and he is now on appropriate treatment. Much damage has been done to his nervous system and that cannot be repaired, but it is hoped that further progress may be stopped. This man has raised a family, each member of which seems to be in very good health. Another man acquired a similar infection in France during the World War, and he had thought little about it until a year or so ago when he noted a diminution of vision in one of his eyes. He went to the venereal clinic in his city and took treatment whenever the spirit moved him, which was not too often. A little later an eye examination disclosed a rather complete optic atrophy in the eye first affected, and the fellow eye had a progressive atrophic condition that had reduced his vision to less than ten per cent of the normal vision. Tragedies? Yes, they are tragedies such as come into the daily lives of many of us. They are examples of the crying need for two things: (1) the education of the public concerning the ravages of syphilis, and (2) a determined campaign for the eradication of syphilis. Eradication? Yes, syphilis can be eradicated from a nation such as ours. It is true that it will require a long period of years. However, the present publicity given the subject in the lay press is adequate proof that Mr. John Public wants to know more about it. We congratulate Surgeon General Parran of the United States Public Health Service for having adopted the control of syphilis as a major part of his present program. He should have every assistance from the medical profession in this project.

The annual conference of secretaries and editors was held in the auditorium of the American Medical Association, November 16 and 17, with some two hundred registrations. Incidentally, this was the first formal gathering to meet in the new hall, a room very well adapted to the numerous headquarters conferences held from time to time. Lighting, heating, and ventilation details have been cared for most efficiently, and a seating capacity of more than four hundred offers commodious quarters for the smaller group meetings. Earl Whedon, of Wyoming, was named chairman of the meeting and at once assumed authority via a grim looking six-shooter, much affected by the cow boys of his native state. Greetings were extended by officials of the American Medical Association, including President Heyd, President-elect Upham, Secretary West, Editor Fishbein and others. Numerous papers and discussions made up the program, outstanding features being talks by Thomas J. Parran, Jr., Surgeon-General of the United States Public Health Department, and Miss Katherine Lenroot, chief of the Division of Child Health and Maternal Welfare. Both of these speakers made many friends by their frank statements of present conditions in their respective departments, and each was generously received by the audience which for that particular period was increased by a large number of those in attendance upon a public health group gathering elsewhere in the city. The editors' round-table conference dinner was held at the Palmer House on the evening of the first day, with genial Holman Taylor, secretary-editor of the Texas State Medical Society, in charge. Dr. Taylor saw to it that the program of the evening went along without a hitch, and some ten or more editorial problems were presented for informal discussion. These meetings have come to be regarded as among the most interesting and informative of the group of several between-annual-session conferences, and it is gratifying to observe an increase in attendance each year.

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To All of Our  
Readers and to  
All of Our Advertisers  
We Wish  
A Merry Christmas

## PRESIDENT'S PAGE

### TIME AND OUR AFFAIRS

Time is said to be an abstraction and its measurement only a convenience, but any certain period of time is characterized by the events which occur, and by the ideas and interests which prevail and may be said to belong to that time. It has been pointed out that any discussion of the issues of that day would tend to reflect the ideas and interests uppermost in that place at that time—ideas, interests, and individual viewpoints change. To be consistent, therefore, each statement should be timed and dated as having been made at a fleeting moment in a particular place, based upon the events, the prevailing ideas, the social interests, and the insistent needs of that moment.

As I look through the files of *The Journal of the Indiana State Medical Association* and other medical periodicals and their then-current comments and discussions, the above is clearly evident. Problems appear as formidable destructive forces, awaken protest and resistance, are dissipated and slowly disappear. Campaigns of propaganda and organized efforts wear themselves out, and protective measures are neglected as the need passes. However, it must be recognized that as long as the activities of medicine are concerned with people, individually or in social groups, human interests and ideas will continue of the greatest importance—ad infinitum—in thought and practice. Such ideas as endure must be consistent with the needs and interests of the major portion of all concerned and must be basic. They are dependent upon principles which must be projected into the future, and can be maintained only by continued watchfulness and effort and emphasis in medical speech and writing.

These principles and the problems which surround them were not first discovered in my presidency, nor have all the problems been settled in it. Some have been adequately met for the time being, but others will appear as problems for future officers and members to struggle with.

If I have not always interpreted your state of mind accurately, or spoken for you as you would have spoken for yourselves, I plead some justification in that I have been guided by what I believe to be the underlying principles and by established policies. Problems are seldom isolated or wholly of the present time—but always as related to other

problems, and must be considered from the viewpoint of effects in the future. I have given thought and my best efforts in your behalf, and I am grateful for your uncritical and loyal support. The progress of the Indiana State Medical Association has been the result of the unselfish interest and well-planned efforts of many men who have directed its affairs throughout the years. The high place of the Indiana State Medical Association among the constituent state organizations of the American Medical Association is one of which we may well be proud. I am deeply conscious of the honor bestowed upon me in giving me the opportunity to serve as your president, and I am appreciative of the kindly cooperation given me by the officers and Executive Committee of the Association, the Council, the House of Delegates, and the various standing committees. I have in mind, also, the unselfish helpfulness and friendliness of officers of county societies, and of members widely located throughout the state, who made it possible to carry on, in times requiring perhaps as many arduous efforts and presenting as many necessary interests and activities as any other like period in the history of the Association.

I did not know there were so many miles to be traveled in Indiana or so many fine medical facilities, and more important still, so many fine medical men, and my medical excursions, despite the travel involved, have given me great pleasure. The friendships I have been privileged to enjoy are abundant compensation for the efforts I have expended in the work.

I have the greatest confidence in Dr. E. D. Clark, the incoming president, and in the president-elect, Dr. Herman M. Baker, and I bespeak for them that same fine cooperation and support that you have given me.

Time moves on, and medical science, social and governmental philosophy, our affairs, and ourselves move with it. Our future position, amid change, will depend upon the vitality of our ideals and the energy which we expend in maintaining our direction and progress.

*R. A. Dennerich*

## TAX FEATURES OF THE

ALBERT STUMP, ATTORNEY FOR THE  
INDIANA STATE MEDICAL ASSOCIATION

The social security program originated with the federal government, in the Act known as the Social Security Act, which was approved August 14, 1935. It provides for two kinds of taxes: (1) a tax with respect to employment of any number; (2) a tax with respect to employment of eight or more.

### I. THE TAX WITH RESPECT TO ALL EXCEPT EXEMPTED EMPLOYMENTS

**T**here are certain employments that are not included within the Act. Those exempted employments are:

1. Agricultural labor;
2. Domestic service in a private home;
3. Casual labor not in the course of the employer's trade or business;
4. Service by those past the age of sixty-five;
5. Service of officers and crew of United States vessels;
6. Employment in the United States Government;
7. Employment in the State Government or any subdivision thereof;
8. Employment in religious, charitable, scientific, literary, or educational activities, and for the prevention of cruelty to children or animals where no part of the net earnings of the organization doing the employing is for the benefit of any private individual.

Except for these classes of workers who are not included in the Act, Title VIII applies to all employment. It levies a tax payable to the federal government upon the wages of every individual after December 31, 1936, beginning with the rate of one per cent and graduated upward at one-half of one per cent every three years until December 31, 1948, where the rate reaches three per cent per annum, at which point it remains fixed thereafter.

This is a tax that is to be deducted from the wages of every employee, whether one or more. It is deducted by the employer, who is made liable for the payment of the tax. That is, the tax is deducted by the employer and the government looks to him as the conduit through whom the taxes reach the government.

The employer pays an excise tax with respect to individuals in his employ in exactly the same amount, to the federal government. This tax, which ultimately will reach six per cent of the payroll, whether of one individual or of many, is one over which the state government has no jurisdiction. These taxes are paid into the Treasury of the United States as internal revenue collections.

This tax is not connected with the question of unemployment, but obviously is intended as the

source of the additional revenue necessary to take care of the federal grants to states for old age assistance; for the federal old age benefits; for federal grants to states in aid of dependent children; for maternal and child welfare; and public health work.

This tax is payable by physicians on the wages of any office girls or other employes they may have. The federal government has already sent circulars out through the mail on which reports are to be made with a view to getting the administration of this Act into operation.

Where two or more doctors may be using the services of the same employee, or employes, there is nothing in the Act which would prevent that employment being in the name of one doctor, for the purpose of simplifying the reports, and the payment of the tax.

### II. TAX ON EMPLOYERS OF EIGHT OR MORE

**T**he federal government includes under Title IX of the Social Security Act a tax on total wages with respect to employment of those covered by the Act where the employer has eight or more employees. That tax is already effective. The rate for the calendar year 1936 is one per cent. It increases by one per cent each year until it reaches three per cent in 1938, at which point it remains fixed. This is in addition to the tax discussed under Item I.

But the federal Act provides for credit against this tax of ninety per cent for payments made into an unemployment fund under a state law. This tax is for the payment of the cost of government unemployment insurance. If the state system set up under the state law meets the requirements of the federal government, then payments made under the state law are credited against the federal tax up to ninety per cent of the federal tax.

The Unemployment Compensation Act of Indiana in force March 18, 1936, has been approved by the Federal Social Securities Board and payments made into the State Unemployment Fund pursuant to the Indiana Act are credited against the federal tax to the extent of ninety per cent.

Forms upon which returns of this tax are to be made to the state are prepared by the state in such a manner as to properly separate the unemployment compensation tax of the state from what is paid to the federal government under this Title IX of the federal Act.

This unemployment compensation tax is one in which the physicians probably will have but little direct interest.

The rates on the employment of eight or more

## SOCIAL SECURITY ACT

for the portion of year 1936 remaining after the effective date of the Act are 1.2 per cent of the payroll, which is payable to the state government, and .1 of 1 per cent which is payable to the federal government. The payments to the state government are made monthly; the payment to the federal government is made at the end of the year. The rates for 1937 will be 1.8 per cent of the payroll to the state government and .2 per cent to the federal government. The graduation upward will continue until the total amount paid to state and federal governments will be 3 per cent on the payrolls.

One comes within this tax if he has eight or more employees who are employed for a day or some portion of a day during twenty weeks of the year.

The following editorial is taken from *The Journal of the American Medical Association* for November 28, 1936:

### PHYSICIANS AND OLD AGE PENSION TAXES UNDER THE SOCIAL SECURITY ACT

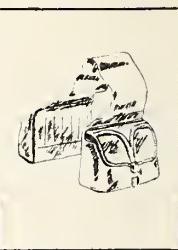
Preliminary procedures are under way to make effective the old age benefit provisions of the Social Security Act. The regulations that have been promulgated by the Bureau of Internal Revenue looking toward the assembly of the mass of detailed data with respect to the employers and employes from whom the taxes are to be collected are of immediate interest to physicians.

Each person who on November 16 was the employer of one or more persons, subject to the exceptions noted, must have reported that fact prior to November 21 to the postmaster from whose post office the employer obtained his office or business mail. He must also have made application on form SS-4 for the assignment of a number—an "identification number" to be used for identification purposes in connection with the collection of taxes under the act. Physicians who were employers on the date named were required to comply with this requirement. If they failed to do so, they should now communicate with their local postmaster for instructions as to how to proceed to make the delayed application. A physician who became an employer after November 16 must also apply for an identification number within a period of thirty days after the relationship of employer and employee is established. This application, the regulations provide, must be made to the field office of the Social Security Board in the area in which the office of the physician is situated or, in the absence of such field office, to the Social Security Board at Washington, D. C.

Persons who were employes on November 24 are likewise required to obtain numbers, called "account numbers," by filing application on form SS-5, on or before December 5, with the local postmaster. Persons becoming employes after November 24 must also file application for numbers thirty days after the employment begins. While physicians generally are considered, under the regulations, as independent contractors and consequently not subject to the taxes imposed on employes, if physicians are employed on a full time or part-time salary basis, they are apparently to be considered as employes. Such physicians must file application for "account numbers" on form SS-5. As employes, they are subject to the tax on employes, and their employers must pay the employers' tax with respect to them.

Certain employments do not come within the old age benefit provisions of the Social Security Act. Among the exceptions are agricultural labor, domestic service in a private home, casual labor not in the course of the employer's trade or business, service performed by an individual who has attained the age of 65, service performed in the employ of the United States or of any state or subdivision or instrumentality of either, and service performed in the employ of a corporation, community chest, fund or foundation organized and operated exclusively for religious, charitable, scientific, literary or educational purposes, or for the prevention of cruelty to children or animals, no part of the net earnings of which inures to the benefit of any private shareholder or individual. Physicians who employ only persons embraced within these excepted employments or who are themselves engaged in such excepted services, are not required to make application for identification or account numbers.

Employers' and employes' taxes will be collected by means of monthly returns to be filed by employers, who not only must pay to the local collector of internal revenue the tax imposed on employers, but also must deduct from the wages of their employes the employe's tax and transmit that also to the collector. The first returns will be due not later than March 1, 1937, covering wages paid for services rendered during the month of January. The regulations that have been promulgated cover in detail the records that must be kept by employers, the method of executing returns, the information they must contain and other matters relating to the tax. Physicians should promptly familiarize themselves with all the requirements, so that as much confusion as possible may be avoided. The Journal will from time to time offer suggestions to aid physicians in meeting the requirements of the act.



## Indiana Medicine in Retrospect

L. G. ZERFAS, M.D.  
Historian, Indiana State Medical Association

### FIRST MEDICAL DISTRICT SOCIETY\*

#### WILLIAM CHAUNCY WHITTLESEY

Sullivan County, Indiana

Dr. William Chauncy Whittlesey was the first physician to settle in Sullivan County and was licensed to practice at the first meeting of the First District Medical Society, June 2, 1817.<sup>1</sup> Nothing is known of his medical education, but he is said to have had a thorough training before his emigration to Indiana. He was born in Tolland, Connecticut, December 6, 1792, the son of Judge Samuel Whittlesey and Sarah Van Densen. Many of his family had attended Yale College, so that it seems more than likely that he attended that school or at least that he secured his medical education at some eastern school. On April 27, 1816, he was listed as a surgeon in the United States Navy.<sup>2</sup> He served on board the sloop *Ontario* in the Mediterranean Sea. Sometime between April and July, 1816, Dr. Whittlesey settled in Sullivan County, Indiana having been admitted to the Union in that year. He was soon followed by other members of his family, including his father, who arrived October 20, 1817. Dr. Whittlesey and his two brothers, Dr. Charles Egbert Whittlesey and Samuel Gilbert Whittlesey, entered into extensive business enterprises, in addition to their professional practice. They operated a general merchandise store, a saw mill, a brick yard, and a distillery. On November 20, 1822, Dr. William Chauncy Whittlesey married Ann Elizabeth Rapine.<sup>3</sup>

His practice extended from the west fork of White River, west to Lamotte Prairie in Illinois, and from Vincennes north to the territory around Turman's Fork in Sullivan County. His visits were made on horseback along a trail known as Hart's Trace, from Shakertown to the ferry of Thomas Smith on White River below the mouth of Eel River.

The old day book kept by Dr. Whittlesey, bound in leather and with pages yellowed by age, records the nature of his many transactions during the period from July, 1816, to 1820. The book is in a remarkable state of preservation and was found

more than fifty years ago in the loft of an old building at Carlisle. This book is the earliest account, so far as is now known, kept by any physician practicing medicine in the Territory or State of Indiana. The records contain many interesting items of general historical interest in addition to those associated with his medical practice, which Dr. Maple has published in his *Medical History of Sullivan County*.

The general store carried supplies adequate for the pioneers including gunpowder and whiskey. Purchases by physicians in the surrounding country are also noted. Dr. Steward who lived on the Illinois side of the Wabash River, purchased a spring lancet for \$3.00 and a large syringe for \$6.50. Dr. Fullerton, probably Charles Fullerton, of Princeton, bought an injecting syringe for \$6.50. The names of other physicians are recorded in various business transactions. Dr. Elias McNamee, of Vincennes, gave him \$5.00 for shoeing his horse, the same being credited to one blacksmith, Rogers, who owed Dr. Whittlesey a bill. Demonstrations of such business sagacity were not uncommon among the pioneer physicians. Dr. Lawrence S. Shuler, of Vincennes, later of Terre Haute, purchased a looking glass priced at \$10.00 and there were two other unexplained charges, one for \$10.00 and the other for \$60.00. Dr. Shuler did the greater part of the surgical practice in this section of Indiana and doubtless had frequent occasion to visit in Sullivan County.

Recorded items in the day book give an interesting account of the drugs used in practice and the charges made for medicine and visits during the period from 1816 to 1820, covering the first four years of the state's history. Dr. Whittlesey's fee was seventy-five cents for a visit in the town of Carlisle and fifty cents per mile for a visit in the country. Extra charges were made for night calls. His charges were made in accordance with the ability of the patients to pay. His surgical practice probably covered a wide range of minor procedures, noted in the day book by, "removal of a small tumor \$2.00," "setting arm \$1.00," "setting shoulder \$5.00," "vaccination \$1.00," "scarifying an eye \$1.75," "introducing a seton \$1.00," "reducing prolapsus in child \$1.00," "lancing phlegmon 25 cents," and "cutting child's tongue \$1.00" (probably cutting frenum). For bleeding a patient, a procedure so frequently employed, he charged twenty-five cents. Robert Harrison, one of the innkeepers at Carlisle, was puked and purged for

\* Continued from THE JOURNAL of the Indiana State Medical Association, Vol. 29, No. 11, November, 1936, p. xxvii.

<sup>1</sup> James B. Maple, M.D.: A Medical History of Sullivan County, Indiana. *Sullivan Union Press*, Sullivan, 1936, p. 38. Transactions of the Indiana State Medical Society, 1874, p. 54.

<sup>2</sup> List of Officers of the Navy of the United States and of the Marine Corps from 1775 to 1900. Edited by Edward W. Callahan. L. R. Hammersly & Co., New York, 1901, p. 586.

<sup>3</sup> Letter of Miss Margaret L. Goslee, Evansville, Ind.

fifty cents. Extracting teeth was done for twenty-five cents each. The charges for obstetrical cases ranged from five to ten dollars.

The medicines employed by Dr. Whittlesey included Rochelle salts, castor oil, Peruvian bark, calomel, jalap, magnesia, Carolina pink, asafoetida, Bateman's drops, balsam of honey, gum guaiac, senna, licorice, paregoric, squills, chamomile, hartshorn, and cream of tartar. Patent medicines include the very popular remedy Godfrey's Cordial and the Elixir of Health. Very possibly he found good use for his "Itch Ointment" which probably contained some fatty vehicle with sulphur added to it.

Charges for medicine were extra and above the cost of the visit. The price of the medicine ranged from 12½ cents for a dose of salts to fifty cents for an ounce of Peruvian Bark. The latter was taken in generous amounts of whiskey. Whiskey alone was not without its therapeutic proponents. Charges for whiskey ran from 37½ cents a quart to \$1.25 per gallon.

August 14, 1817, Dr. Whittlesey bought several lots when the town of Merom was laid out. He contributed \$20.00 to the "Meeting House," and \$120.00 to the Seminary, of which he was appointed trustee by the Governor of the state. He took an active interest in Masonic affairs and was the first secretary of Hiram Lodge No. 18 organized in 1821.<sup>4</sup>

His activities in relation to the First District Medical Society included an appointment to the board of censors at the meeting of May 3, 1819,<sup>5</sup> and with Philip Barton and Lawrence S. Shuler, was elected a delegate to represent the district at the next annual meeting of the State Medical Society.<sup>6</sup> He was on the committee of the district society which chose a delegate to meet in convention for the purpose of forming a district pharmacopeia.<sup>7</sup> Dr. Benjamin Rush Helms says of him, "Although a slight and delicate man physically, he possessed the power of great endurance. But when we think of the many disadvantages that naturally beset the physicians of those early days of our country's history; that he was not, as we, favored by good roads and protecting clothing, his means of travel being confined to horseback; the condition of the country, yet principally wild not admitting of any other more easy, had they even existed; we are not surprised that he could not possibly stand such a life long."<sup>8</sup>

Dr. Whittlesey died August 16, 1824,<sup>9</sup> three days after his brother, Dr. Charles Egbert Whittlesey.

<sup>4</sup> *Western Sun and General Advertiser*, Vincennes, December 15, 1821, Vol. 12, No. 46, p. 3, c. 4.

<sup>5</sup> *Indiana Centinel and Public Advertiser*, Vincennes, May 6 and 13, 1820, Vol. 4, No. 5 and 6, p. 1, c. 5; December 2, 1820. *Indiana Centinel*, May 22, 1819.

<sup>6</sup> *Indiana Centinel*, Vincennes, December 2, 1820, p. 1, c. 1.

<sup>7</sup> Maple, *Medical History of Sullivan County*, p. 41 and 95. Kemper, G. W. H., *Medical History of Indiana*, American Medical Association Press, 1911, p. 65.

<sup>8</sup> *The Masonic Register*, Vevay, Ind., January 11, 1825.

<sup>9</sup> *Western Sun*, Vincennes, August 3, 1833, p. 1, c. 5.

<sup>10</sup> Letter of Mrs. Frances L. Zollinger, Tulsa, Okla., April 9, 1936. Alfred Patton, M.D., *Medical History of Vincennes*. Transactions of the Indiana State Medical Society, 1874, p. 54.

<sup>11</sup> *Western Sun*, May 21, 1836, p. 3, c. 1. Captain Alfred Pirtle, *The Battle of Tippecanoe*. *Filson Club Publications*.

John P. Morton & Co., Louisville, 1900, p. 112-113.

<sup>12</sup> *Western Sun*, December 21, 1833, p. 3, c. 5; October 22, 1836, p. 3, c. 4.

<sup>13</sup> *Western Sun*, January 25, 1834, c. 5, p. 3. Letter of Mrs. Zollinger.

Both died of so-called remittent fever. His brother Charles had studied medicine under him and had just commenced practice. Both were very young men, William being thirty-one, and Charles twenty-two years of age. Dr. Shuler, of Terre Haute, delivered the memorial address. Two years later (1827), Dr. Shuler himself died, so that in their deaths the First District Medical Society and the entire southwestern part of Indiana lost two of its most able and prominent physicians.

DR. HIRAM DECKER  
Vincennes

Dr. Hiram Decker was the son of Colonel Luke Decker, who first came to Vincennes in 1770, probably while in the Revolutionary War service.<sup>9</sup> He later brought his family and settled on the River Du Chat, five miles from Vincennes where Purcell Station now stands. Here Hiram Decker was born, November 17, 1794.<sup>10</sup> Colonel Luke Decker was



Dr. Hiram Decker

made justice of the peace when the county was first organized, served for years as judge of the county court, was on the first Board of Trustees of Vincennes University, and was able to give his son a very good education for that time. Young Hiram Decker was a great admirer of General William Henry Harrison, and when eighteen, he joined a regiment of dragoons under Colonel Benjamin Parke and fought in the Battle of Tippecanoe.<sup>11</sup> At the end of the campaign he commenced the study of medicine with Dr. Jacob Kuykendall. In 1815 he formed a partnership with Dr. Kuykendall which lasted until the latter's death,

<sup>9</sup> *Western Sun*, Vincennes, August 3, 1833, p. 1, c. 5.

<sup>10</sup> Letter of Mrs. Frances L. Zollinger, Tulsa, Okla., April 9, 1936. Alfred Patton, M.D., *Medical History of Vincennes*. Transactions of the Indiana State Medical Society, 1874, p. 54.

<sup>11</sup> *Western Sun*, May 21, 1836, p. 3, c. 1. Captain Alfred Pirtle, *The Battle of Tippecanoe*. *Filson Club Publications*.

John P. Morton & Co., Louisville, 1900, p. 112-113.

<sup>12</sup> *Western Sun*, December 21, 1833, p. 3, c. 5; October 22, 1836, p. 3, c. 4.

<sup>13</sup> *Western Sun*, January 25, 1834, c. 5, p. 3. Letter of Mrs. Zollinger.

September 5, 1833.<sup>12</sup> On September 14, 1819, he married Dr. Kuykendall's daughter, Eliza.<sup>13</sup>

From the *Western Sun* we learn a great deal of Dr. Decker's activities and other partnerships. On June 3, 1826, "Doctors J. Kuykendall and Decker propose receiving in payment Country Linen, Beeswax, Corn and Pork if delivered in the proper season. Likewise good fat cattle the most liberal prices will be given." July 5, 1834: "Dr. Decker still keeps his office at the old stand, and hopes his knowledge of the diseases of the country acquired by a practice of 18 years with his undivided attention to business, will entitle him to a share of public patronage." On February 3, 1834: "Mr. H. Ruble, of Vincennes returns his thanks to Messrs. Decker, (W. W.) Hitt, (Joseph) Brown, and (Joseph) Maddox (Surgeons and Physicians) for their strict attention, judgment, skill and ability in extracting from his right breast a large tumor which had for a time rendered his arm useless. He has the pleasure to assure them that all the anticipated benefits arising from such an operation will shortly be realized."<sup>14</sup> In 1837 Dr. Decker bought out the drug store of Dr. Maddox and took Dr. F. V. McKee and Dr. Brown as partners.<sup>15</sup> These men may have been his students. The same year this notice appeared in the *Western Sun*: "University of Vincennes, Medical Department. First Course. The lectures in this institution will commence on the first Monday in December, 1837, and end on the first Monday in March, 1838. Professor of Materia Medica and Pharmacy, H. Decker." As far as is known this is the first organization of a medical school in Indiana.<sup>16</sup>

Dr. Decker was elected secretary of the First District Medical Society in May, 1819,<sup>17</sup> and automatically became one of the censors. He held this office for several years and was re-elected secretary when the society was reorganized in 1827; he was also appointed a delegate to the State Medical Society to serve two years.<sup>18</sup> We know that he served as secretary until 1833 and perhaps longer.<sup>19</sup> The State Medical Society had been organized in 1820 and by 1826 had taken over the appointing of the Censors for the different districts. On December 14, 1826, Dr. Decker was appointed by the State Society as one of the Censors for the First Medical District which included Knox, Sullivan, Daviess and Martin counties.<sup>20</sup>

<sup>14</sup> *Western Sun*, February 8, 1834, p. 3, c. 1.

<sup>15</sup> Ibid, January 6, 1838, p. 4, c. 4, and January 30, 1836, p. 3, c. 3; August 26, 1837, p. 4, c. 4.

<sup>16</sup> *Indiana Journal*, Indianapolis, October 14, 1837.

<sup>17</sup> *Indiana Sentinel and Public Advertiser*, Vincennes, May 6, 1820, p. 3, c. 4; May 13, 1820, Vol. 4, No. 5, p. 1, c. 5. *Indiana Sentinel*, Vincennes, May 22, 1819, and October 23, 1819, p. 3, c. 2.

<sup>18</sup> *Western Sun*, June 23, 1827; October 16, 1830; November 26, 1831; June 9, 1832. Hubbard Madison Smith, Medicine in the Northwest Territory. Transactions of the Indiana State Medical Society, 1906. *Indiana Journal*, February 20, 1827.

<sup>19</sup> *Western Sun*, October 16, 1830, p. 3, c. 5.

<sup>20</sup> *Indiana Journal*, Indianapolis, February 20, 1827.

On February 22, 1828, Dr. Decker was appointed one of three from Knox County on the Jackson Central Committee of Indiana,<sup>21</sup> but later because of patriotism and personal regard for his old commander, General Harrison, he promoted his election and was chosen elector on that ticket.<sup>22</sup> Later he was appointed receiver of public moneys by President Harrison. It is interesting to note in an address given in 1833 by General Harrison before the Hamilton County Agricultural Society on the use of catalpas for fences, he quoted Dr. Decker, saying that Dr. Decker's father had cut a bar post for a stockade in 1770<sup>23</sup> and that it was still sound. Dr. Decker had several pieces of furniture given him by General Harrison which are now in the possession of his great-granddaughter.<sup>24</sup>

Dr. Decker was a member of the Thespian Society as early as 1824,<sup>25</sup> a member of the Board of Trustees of the Seminary from 1828-1831,<sup>26</sup> chairman of a meeting of the Louisville and Vincennes Road in 1835,<sup>27</sup> and was Worshipful Master of the Masonic Lodge in 1836. He was president of the Vincennes Academy from 1836-1838<sup>28</sup> and a member of the Board of Trustees all the rest of his life. He was also a candidate for representative in the state legislature in 1836.<sup>29</sup>

Dr. Decker is described as having white hair at the age of twenty-five; although he was very kind-hearted, he had a quick temper. One time a neighbor met him and accused him about a matter that the doctor thought reflected upon his honor. He jerked the sword from his cane and wounded the man with one thrust. He instantly repented and took him into his office and dressed the wound. Dr. Decker was typical of the pioneers of the Middle West. Their character had a sharpness and firmness of outline as if cut upon steel. They were decided in opinion, resolute in purpose, bold in speech, of warm friendship and uncompromising hostility. Dr. Decker died September 3, 1863, in Vincennes.<sup>30</sup>

<sup>21</sup> *Western Sun*, March 15, 1828, p. 3, c. 1.

<sup>22</sup> Ibid, May 21, 1836, p. 3, c. 1.

<sup>23</sup> *Western Sun*, August 3, 1833, p. 1, c. 5.

<sup>24</sup> Letter of Mrs. Zollinger.

<sup>25</sup> *Western Sun and General Advertiser*, Vincennes, January 3, 1824, Vol. 14, o. 49, p. 3, c. 3.

<sup>26</sup> *Western Sun*, April 2, 1831, p. 1, c. 4.

<sup>27</sup> Ibid, October 17, 1835, p. 3, c. 1.

<sup>28</sup> *Western Sun*, October 24, 1838, p. 4, c. 5, and November 19, 1836, p. 31, c. 1.

<sup>29</sup> Ibid, July 16, 1836, p. 3, c. 1.

<sup>30</sup> Printed obituary enclosed in letter of Mrs. Zollinger.

Editor's Note: This is the final article of the present series of historical articles by Dr. L. G. Zerfas. They will be discontinued after this issue while Dr. Zerfas is doing research work in England.

## 1936 MEMBERS OF THE INDIANA STATE MEDICAL ASSOCIATION

The following list of members of the Indiana State Medical Association is published primarily for the purpose of ascertaining errors. This roster includes the names of all those who were members on November 20, 1936. Membership established after that date could not be included in this issue of **THE JOURNAL**.

There are some instances in which a member resides in one county and holds membership elsewhere; in this list all members are listed under the counties wherein they reside.

Names of members who have died during the year do not appear on this list.

The letter (H) following a name indicates that the physician is an honorary member of his local society and of the Indiana State Medical Association.

We shall appreciate the cooperation of members in reporting any errors to **THE JOURNAL**, 1021 Hume Mansur Building, Indianapolis.

<b>ADAMS COUNTY</b>	<b>Monroeville</b>	<b>Zionsville</b>	<b>Twelve Mile</b>
<i>Berne</i>	S. P. Hoffman	L. S. Bailey	Donald L. Miller
Ernest Franz	Don D. Johnston	O. E. Brendel	Walton
Myron Habegger	J. W. Kannel	E. D. Johns	E. P. Flanagan
Amos Reusser	O. T. Kidder	<i>Woodburn</i>	E. A. Spohn
<i>Decatur</i>	E. A. King	Edward Moser	
S. D. Beavers	E. H. Kruse	<b>BARTHOLOMEW COUNTY</b>	
Palmer Eicher	W. E. Kruse	Columbus	<b>CLARK COUNTY</b>
Ben Duke	J. C. Lill	F. J. Beck	Jeffersonville
F. L. Grandstaff	Maurice Lohman	J. W. Benham	Samuel L. Adair
G. J. Kohne	A. H. Macbeth	Bertha A. Clouse	J. H. Baldwin
J. M. Miller	J. E. McArdele	Walter S. Fisher	Ralph Bruner
C. C. Rayl	G. A. McDowell	P. C. Graham	E. P. Buckley
W. E. Smith	R. B. McKeeman	Wm. Lennis Green	Austin Funk
<i>Geneva</i>	Edgar Mendenhall	J. K. Hawes	C. F. C. Hancock
C. P. Hinchman	A. L. Mikesell	H. H. Kamman	Nathaniel C. Isler
<i>Preble</i>	Carl G. Miller	A. M. Kirkpatrick	H. H. Reeder
J. C. Grandstaff	O. J. Miller	Maurice McKain	H. R. Wilber
<b>ALLEN COUNTY</b>	Richard Miller	H. J. Norton	<i>Sellersburg</i>
<i>Fort Wayne</i>	C. F. Moats	Wm. J. Norton	Samuel S. Foss
J. R. Adams	G. E. Moats	Lyman Overshiner	A. C. Vandevent
Harry Aldrich	Arthur E. Moravec	Richard K. Schmitt	<i>Charleston</i>
Paul P. Bailey	H. L. Murdock	Lotta A. Suverkrup	T. J. Marshall
Karl Beierlein	Carroll O'Rourke	Dorothy D. Teal	Clarksville
D. R. Benninghoff	Kermitt Perrin	Everett W. Williams	T. M. Smith
Raymond Berghoff	Milton Popp	E. U. Wood	<i>New Washington</i>
J. E. Bickel	M. F. Porter	Omer Wooldridge	R. S. Taggart
H. V. Blosser	Nelson H. Prentiss	Byron K. Zaring	Henryville
Theo. R. Borders	Henry Ranke	<i>Hope</i>	Houston W. Shaw
G. T. Bowers	Lyman T. Rawles	Gordon H. Haggard	<b>CLAY COUNTY</b>
J. W. Bowers	H. A. Ray	L. D. Reed	Brazil
H. O. Bruggeman	B. W. Rhamy	<i>Elizabethtown</i>	Fred C. Dilley
Doster Buckner	W. B. Rice	O. A. DeLong	J. L. Lambert
E. L. Bulson	Noah Allen Rockey	C. M. Jackson	J. F. Maurer
Elizabeth Burns	Juan Rodriguez	<i>Hartsville</i>	Frederick Nussel (H)
D. F. Cameron	D. L. Rossiter	Marvin E. Hawes	H. M. Pell
W. W. Carey	Maurice Rothberg	<b>BENTON COUNTY</b>	John C. Shattuck
Ernest R. Carlo	C. J. Rothschild	Anubia	C. C. Sourwine
E. L. Cartwright	Harry W. Salom	W. H. Taylor	T. M. Weaver
M. B. Catlett	N. L. Salon	<i>Boswell</i>	<i>Clay City</i>
H. R. Chester	C. A. Savage	C. W. Atkinson	Walter Bond
W. R. Clark	A. R. Savage	O. M. Flack	I. C. Rentschler
John E. Conley	D. W. Schafer	H. H. Hubbard	<i>Staunton</i>
Charles J. Cooney	M. F. Schick	<i>Earl Park</i>	P. H. Veach
Beaumont S. Cornell	Ed H. Schlegel	C. T. Bundy	<i>Coalmont</i>
C. R. Dancer	H. Vaughn Scott	<i>Fowler</i>	H. H. Ward
E. F. DeVaux	David I. Schwartz	W. H. Altier	<b>CLINTON COUNTY</b>
I. W. Ditton	Herbert Senseny	D. E. Mavity	Frankfort
M. H. Draper	Lawrence Shinaberry	Verne L. Turley	F. A. Beardsley
A. H. Duemling	John Short	<i>Oxford</i>	M. F. Boulden
W. W. Duemling	E. C. Singer	H. G. Bloom	C. A. Burroughs
K. C. Eberly	E. D. Smith	E. E. Parker	A. G. Chittick
B. M. Edlavitch	L. E. Somers	Virgil Scheurich	C. B. Compton
L. W. Elston	Roger C. Sommer	Otterbein	T. A. Dykhuizen
Ralph W. Elston	A. J. Sparks	M. S. King	Alexander Hamilton
W. F. Engelbert	A. E. Stoler	J. E. McCabe	R. A. Hedgecock
C. H. English (H)	John Swanson	Geo. W. Marsh	J. M. Johnson
A. N. Ferguson	Walter Thornton	<b>BOONE COUNTY</b>	W. W. Jones
A. M. Fichman	Phillip S. Titus	Lebanon	M. T. McCarty
H. W. Foy	E. M. Van Buskirk	H. A. Beck	C. A. Robison
H. W. Garton	Walter H. Vance	John D. Coons	Hollace R. Royster
W. F. Gessler	Metodi Velkoff	O. C. Higgins	S. B. Sims
N. H. Gladstone	J. C. Wallace	C. G. Kern	J. A. Van Kirk
H. E. Glock	S. G. Welty	John R. Porter	B. A. Work
L. K. Gould	Kathryn Whitten	E. A. Rainey	<i>Mulberry</i>
Allen Hamilton	Robt. W. Wilkins	Wm. H. Spieth	Nelson B. Combs
R. L. Hane	Irving H. Willot	Wm. H. Williams	J. A. Kent
K. C. Hardesty	A. C. Worley	<i>Royal Center</i>	<i>Forest</i>
L. P. Harshman	W. C. Wright	D. R. Ivey	F. P. AuBuchon
Harry C. Harvey	A. R. Wyatt (H)	Wm. H. Williams	
Morse Harrod	Jas. L. Wyatt		
A. M. Hasewinkle	Noah Zehr		
A. P. Hattendorf	<i>New Haven</i>		
Ruth M. Hoetzer	G. A. Smith		
Jay F. Havice	C. W. Dahling		

	<i>St. Paul</i>				<i>Kingman</i>
Ivan E. Carlyle <i>Rossville</i>	W. R. Turner <i>Westport</i>	C. J. Stover	W. A. Price	A. L. Ratcliff	
John S. Ketcham <i>Kirklin</i>	E. A. Porter Chas. Wood	E. F. Tindal	J. S. Slabaugh	B. J. Smith	<i>Williamsport</i>
Wm. C. Mount	<b>DEKALB COUNTY</b>	I. N. Trent ( <b>H</b> )	Lotus M. Slabaugh <i>Wakarusa</i>	S. S. DeLancey	
<b>CRAWFORD COUNTY</b>	<i>Auburn</i>	Elaine Vlaskamp	Chas. L. Amick	G. S. Porter	
English	H. M. Covell	L. O. Walters	F. I. Eicher	T. E. Ward	<i>Hillsboro</i>
N. E. Gobbel	L. N. Geisinger	John H. Williams		E. G. Bounell	<i>Pine Village</i>
G. B. Hammond <i>Milltown</i>	A. V. Hines	Amelia T. Wood		Geo. W. Dewey	<i>Veedersburg</i>
Jess J. Johnson	D. M. Hines	Gerald S. Young	<i>Bristol</i>	C. B. McCord	
<b>DAVIESS-MARTIN COUNTY</b>	Harold Nugen	<i>Daleville</i>	S. S. Frybarger	Jno. B. Owens	<i>Wallace</i>
<i>Loogootee</i>	J. A. Sanders	<i>Albany</i>	New Paris	Hubert M. Rusk	<i>West Lebanon</i>
Wm. Gilkison	Bonnell M. Souder	K. E. Puterbaugh	E. D. Stuckman	Richard Stephenson	
J. F. Michaels	C. S. Stewart	<i>Daleville</i>	<b>FAYETTE-FRANKLIN COUNTIES</b>		
J. W. Strange <i>Odon</i>	Willard W. Swarts	O. Arnold Tucker	<i>Brookville</i>	<b>FULTON COUNTY</b>	
I. E. Bowman	<i>Butler</i>	<i>Yorktown</i>	E. M. Glaser	<i>Rochester</i>	
Jerome DeMotte <i>Shoals</i>	Clayton B. Hathaway	C. H. Wright	Ralph Sappfield	M. O. King	
J. S. Gilkison	W. F. Shumaker		H. N. Smith	M. E. Leckrone	
C. F. Hope	Chas. Weirich		<i>Connersville</i>	H. W. Markley	
E. E. Long	<i>Garrett</i>		L. N. Ashworth	Mark M. Piper	
Washington	J. A. Cleverger		Irvin E. Booher	C. L. Richardson	
N. Maude Arthur	J. E. Douglas		Jediah H. Clark	Dean K. Stinson	<i>Fulton</i>
B. O. Burress	M. E. Klingler		R. H. Elliott		
C. P. Fox	M. O. Klingler		Stanley Gordin		
R. L. Kleindorfer	R. A. Nason		Stanton E. Gordin		
H. B. Lindsay	D. M. Reynolds		Albert F. Gregg		
Wm. O. McKittrick	W. G. Symon		W. A. Kemp		
S. L. McPherson	J. W. Thomson		J. S. Leffel		
A. A. Rang	<i>Waterloo</i>		H. C. Metcalf		
E. Brayton Smoot	E. A. Ish		R. D. Morrow		
H. C. Wadsworth	J. P. Showalter		David G. Pugh		
<i>Burns City</i>	<b>DELAWARE-BLACK-FORD COUNTIES</b>		H. W. Smelser		
T. A. Hays <i>Elnora</i>	<i>Eaton</i>		F. J. Spilman		
Mac Guyer Porter	G. F. Ames ( <b>H</b> )		<i>Everton</i>		
J. R. Rohrer <i>Plainville</i>	J. M. Atkinson		O. E. Dale		
D. H. Swan	O. A. Hall		<i>Laurel</i>		
<b>DEARBORN-OHIO COUNTY</b>	T. J. Mansfield ( <b>H</b> )		S. A. Gifford		
Aurora	<i>Hartford City</i>		<i>Oldenburg</i>		
Win. F. Duncan	Wendell W. Ayres		George Obery		
J. M. Jackson	H. L. Buckles		<b>FLOYD COUNTY</b>		
C. W. Olcott	Geo. H. Dando		<i>New Albany</i>		
O. H. Stewart	Guy A. Owslay		A. M. Baker		
James F. Treon	Bryce P. Weldy		James W. Baxter		
E. R. Wallace	L. E. Werry		J. W. Baxter, Jr.		
<i>Lawrenceburg</i>	<i>Montpelier</i>		S. M. Baxter		
A. T. Fagaly	T. J. McKeen		J. E. Bird		
Wm. J. Fagaly	F. M. Reynolds		C. E. Briscoe		
Edwin L. Libbert	<i>Muncie</i>		D. F. Davis		
J. M. Pfeifer	Clay A. Ball		Parvin Davis		
G. F. Smith	Roscoe H. Beeson		Geo. H. Day		
<i>Rising Sun</i>	Margaret F. Benjamin		W. F. Edwards		
Geo. H. Hansell	Henry E. Bibler		W. H. Garner		
<i>Dillsboro</i>	Clarence L. Bock		John P. Gentile		
Frank Downey	E. V. Boram		John F. Habermel		
<i>Guildford</i>	Chas. L. Botkin		W. A. Hall		
John E. Elliott	John H. Bowles		R. W. Harris		
<b>DECATUR COUNTY</b>	Karl T. Brown		A. P. Hauss		
<i>Greensburg</i>	Rollin H. Bunch		Chas. P. Leuthart		
P. C. Bentle	E. H. Clauer		Anna McKamy		
W. C. Callaghan	J. H. Clevenger		Wm. Moore ( <b>H</b> )		
F. C. Denny	R. E. Cole		P. R. Pierson		
L. J. DeSwarte	Nila Covalt		A. N. Robertson		
H. S. McKee	Donald A. Covalt		S. T. Rogers		
C. C. Morrison	H. A. Cowing ( <b>H</b> )		Carl P. Schoen		
J. T. Morrison	Elmer T. Cure		P. H. Schoen		
Charles Overpeck	E. C. Davis		H. B. Shacklett		
E. T. Riley	O. M. Deardorff		W. L. Starr ( <b>H</b> )		
I. M. Sanders	J. Frank Downing		F. T. Tyler		
W. E. Thomas	F. W. Dunn		Harry Vories		
B. S. White ( <b>H</b> )	T. R. Hayes		Amzi Weaver		
<i>Letts</i>	F. E. Hill		Wm. W. Weaver		
D. D. Dickson	Howard E. Hill		W. C. Winstandley		
<i>Millhousen</i>	Robert Hill		M. F. Wolfe		
John William Herr	Anson G. Hurley		John T. Wray		
<i>Adams</i>	S. G. Jump		<i>Georgetown</i>		
M. A. Tremain	A. T. Kemper		H. K. Engleman		
	F. E. Kirshman		<i>Galena</i>		
	Jules La Duron		E. L. Sigmon		
	C. A. Leatherman		<b>FOUNTAIN-WARREN COUNTIES</b>		
	R. M. McMichael		<i>Attica</i>		
	L. R. Mason		J. Roy Burlington		
	C. E. Miller		James C. Freed		
	W. J. Molloy		Albert C. Holley		
	L. G. Montgomery		A. R. Kerr		
	Paul D. Moore		<i>Covington</i>		
	W. C. Moore		J. W. Aldridge		
	Jean Morris		Earl E. Johnson		
	Thos. R. Owens		Simeon Lambright		
	Wm. J. Quick		Alva Spinning		
	A. C. Rettig				
	J. C. Silvers				
	J. M. Silvers				
	O. E. Spurgeon				

V. V. Cameron	Sheridan	Middletown	JACKSON COUNTY	North Modison
Frank S. Caprio	I. W. Davenport	Farrol Dragoo	Crothersville	C. C. Copeland
B. C. Dale	J. W. Griffith	Joseph H. Stamper	Wm. K. Adair	G. A. Estel
E. O. Daniels	A. C. Newby	Newcastle	P. A. Kendall	Guy W. Hamilton
G. R. Daniels	J. L. Reek	R. L. Amos	Seymour	James W. Milligan
A. T. Davis	E. M. Young	C. C. Bitler	W. Durbin Day	Francis Prentatt
M. S. Davis	<i>Arcadia</i>	C. E. Canaday	C. E. Gillespie	Hanover
Robert H. Dunn	J. C. Ambrose	E. S. Ferris	Harold P. Graessle	Julia L. Adams
G. G. Eckhart	Frank Rodenbeck	B. L. Harrison	G. H. Kamman	William B. Adams
L. H. Eshleman	<i>Westfield</i>	W. C. Heilman	Guy Martin	Carl Henning
W. A. Fankboner	Andrew F. Connoy	G. E. Iterman	Louis Osterman	
Pierre J. Fisher		W. U. Kennedy	D. L. Perrin	
H. R. Goldthwaite		E. E. Kirk	E. D. Wright	
E. O. Harrold		H. H. Koons	<i>Brownstown</i>	
A. D. Huff		H. W. MacDonald	Chas. L. Ackerman	John H. Green
George H. Ingram		J. H. McNeill	G. R. Gillespie	W. L. Grossman
R. W. Lavengood		C. F. Sexauer	Freetown	D. W. Matthews
Ralph E. LeMaster		Robert A. Smith	T. E. Conner	D. L. McAuliffe
M. J. Lewis		Walter M. Stout	J. A. Tully	W. H. Stem
Harold E. List		C. E. Thorne	W. C. Van Nuys	<i>Deputy</i>
J. F. Loomis		Ralph N. Arnold	E. K. Westhafer	D. W. Robertson
Eleanor McIlwain		C. H. Bruner	D. S. Wiggins	<i>Scipio</i>
Robert McIlwain		Chas. Milo Gibbs	George Wiggins	W. L. Wilson
J. D. McKay		Oscar Heller	W. W. Wright	
H. A. Miller		R. E. Kinneman	<i>Mt. Summit</i>	JOHNSON COUNTY
C. J. Overman		L. B. Rariden	L. C. Marshall	Franklin
Nettie B. Powell		James R. Woods	<i>Blountsville</i>	Florence Blackford
Sidney Price		<i>New Palestine</i>	Paul Marsh	Harry Murphy
G. G. Richardson		W. H. Larabee	<i>Spiceland</i>	Walter L. Porteus
J. A. Ritchey		E. E. Mace	W. S. Robertson	O. A. Province
S. G. Silverburg		<i>Wilkinson</i>	<i>Shirley</i>	A. W. Recods
E. M. Trook		E. R. Gibbs	Ralph Wilson	R. C. Wilson
J. C. Vaughan		Charles Titus		<i>Edinburg</i>
Samuel Weinberg		<i>Charlottesville</i>		J. V. Baker
		W. R. Johnston		J. Porter Myers
				<i>Whiteland</i>
Russell Baskett				D. L. Phipps
				<i>Greenwood</i>
				J. A. Craig
				C. E. Woodcock
				<i>Trafalgar</i>
				F. P. Albertson
				KNOX COUNTY
				<i>Bicknell</i>
				Maurice S. Fox
				R. H. Fox
				E. H. Tade
				Guy Wilson
				<i>Vincennes</i>
				E. W. Beckes
				N. E. Beckes
				C. L. Boyd
				S. L. Carson
				R. B. Cochran
				M. L. Curtner
				E. T. Edwards
				V. A. Funk
				L. L. Gilmore
				J. M. Goldman
				B. B. Griffith
				H. W. Held
				M. H. C. Johnson
				J. G. Jones
				U. G. Kelso
				A. B. Knapp
				H. D. McCormick
				R. G. Moore
				S. A. Prather
				J. P. Ramsay
				James F. Reilly
				D. H. Richards
				Helen M. Richards
				William Schulze
				C. E. Stewart
				<i>Decker</i>
				Loren Hoover
				E. F. Small
				<i>Freelondville</i>
				M. M. McDowell
				<i>Edwardsport</i>
				J. L. Reeve (H)
				J. A. Seudder
				<i>Oatkawn</i>
				G. H. Springstun
				KOSCIUSKO COUNTY
				<i>Mentone</i>
				T. J. Clutter
				Geo. C. Taylor
				<i>Pierceeton</i>
				G. N. Herring
				T. S. Schuldt

Silver Lake		
E. V. Herendeen	J. J. Chevigny	
Syracuse		
Fred O. Clark	G. E. Comstock	
C. R. Hoy	J. A. Craig	
Warsaw		
G. W. Anglin	S. H. Crossland	
J. R. Baum	L. J. Danilewski	
C. C. Dubois	C. A. DeLong	
Geo. L. Kress	A. J. Dian	
A. C. McDonald	Flavia M. Doty	
S. C. Murphy	J. R. Doty	
O. H. Richer	J. S. Duncan	
Geo. H. Schlemmer	R. A. Elliott	
W. Bert Siders	H. M. English	
Claypool		
H. F. Steele	E. E. Evans	
Leesburg		
C. E. Thomas	E. C. Gaebe	
Everett W. Thomas	E. E. Geisel	
LAGRANGE COUNTY		
Lagrange		
H. G. Erwin	Antonio Giorgi	
C. H. Schultz	Adolph Goldstone	
H. W. Schrock	Joseph Goldstone	
Wolcottville		
J. M. Kercheval	G. S. Greene	
B. H. Pulskamp	A. F. Gregoline	
Topeka		
W. O. Hildebrand	B. F. Gumbiner	
Howe		
A. A. Wade	F. A. Gutierrez	
F. C. Wade	C. M. Harless	
LAKE COUNTY		
Crown Point		
Philip H. Becker	A. T. Harris	
D. E. Gray	R. M. Hedrick	
J. W. Iddings	M. Herscheder	
J. O. Parramore	L. B. Johnson	
C. R. Pettibone	Harry L. Kahan	
R. R. Tracht	A. M. Kan	
William D. Weis	Mikes N. Kalavios	
East Chicago		
G. F. Bicknell	F. J. Kendrick	
Chas. S. Boyd	Geo. J. Koletts	
F. F. Boys	Arnold L. Lieberman	
A. V. Cole	B. W. Marshall	
Thos. F. Cotter	F. J. McMichael	
R. J. Dasse	Frank W. Merritt	
Chas. J. Doneghy	Ira Miltimore	
H. C. Ernst	O. B. Nesbit	
R. C. Hamilton	Oliver S. Olson	
D. R. Johns	H. C. Parker	
Lazar Josif	Bertha Rose	
J. E. Komoroske	H. J. Ryan	
E. L. Levin	E. L. Schaible	
R. J. Liehr	T. J. Senese	
Ora L. Marks	Michael Shellhouse	
D. F. McGuire	E. D. Skeen	
F. H. Mervis	C. M. Stoycoff	
J. S. Niblick	T. B. Templin	
Jas. J. O'Conner	G. L. Verplank	
L. J. Ostrowski	James P. Vye	
H. M. Pritchard	A. A. Watts	
Siegmund Reich	R. O. Wharton	
A. A. Ross	J. M. White	
E. J. Purchla	W. J. White	
C. C. Robinson	O. C. Wicks	
A. G. Schlieker	Robt. N. Wimmer	
Paul B. Smith	C. W. Yarrington	
Robert Spear	P. S. Yocom	
John S. Stanley	Hammond	
J. A. Teegarden	W. M. Bigger	
Hugh A. Vore	J. T. Bolin	
Carl W. Wagar	Fred Braginton	
A. L. Yoder	W. A. Buchanan	
J. M. Zivich	Jos. F. Carlo	
Gary		
W. P. Alexander	B. W. Chidlaw	
C. O. Almquist	J. F. Clancy	
George D. Anthoulis	H. G. Cole	
Belfield Atcheson	G. M. Cook	
H. M. Baitinger	C. H. Crews	
W. M. Behn	Alice H. Davis	
C. H. Bender	H. W. Detrick	
S. R. Best	H. W. Eggers	
L. F. Bills	Ray Elledge	
R. N. Bills	D. C. Emenhisier	
Carl Boardman	J. L. Emenhisier	
C. C. Brink	N. K. Forster	
J. B. Burcham	F. H. Fox	
R. F. Carmody	M. B. Gevirtz	
G. G. Campbell	A. H. Hansen	
Homer		
W. P. Alexander	H. S. Hicks	
C. O. Almquist	Andrew Hofmann	
George D. Anthoulis	W. A. Hornaday	
Belfield Atcheson	W. H. Howard	
H. M. Baitinger	E. S. Jones	
W. M. Behn	R. W. Kretsch	
C. H. Bender	Hedwig S. Kuhn	
S. R. Best	Hugh A. Kuhn	
L. F. Bills	A. W. Lloyd	
R. N. Bills	Chas. B. Matthews	
Carl Boardman	O. O. Melton	
C. C. Brink	Lindsay Morrison	
J. B. Burcham	Richard B. Nelson	
R. F. Carmody	Wm. K. Newcomb	
G. G. Campbell	Louis Nodinger	
Hawthorne		
W. P. Alexander	T. W. Oberlin	
C. O. Almquist	R. O. Ostrowski	
George D. Anthoulis	J. R. Pugh	
Belfield Atcheson	C. W. Rauschenbach	
H. M. Baitinger	A. W. Rhind	
W. M. Behn	Perry Q. Row	
C. H. Bender		
S. R. Best		
L. F. Bills		
R. N. Bills		
Carl Boardman		
C. C. Brink		
J. B. Burcham		
R. F. Carmody		
G. G. Campbell		
Hawthorne		
J. J. Chevigny	Jacob Schlesinger	
G. E. Comstock	E. M. Shanklin	
J. A. Craig	Stanley Skrentny	
S. H. Crossland	H. J. White	
L. J. Danilewski	Alvah A. Young	
C. A. DeLong	Hobart	
A. J. Dian	Jacob Ader	
Flavia M. Doty	L. E. Dupes	
J. R. Doty	H. F. Flannigan	
J. S. Duncan	Dwight Mackey	
R. A. Elliott	A. G. Miller	
H. M. English	Whiting	
E. E. Evans	O. F. Benz	
E. C. Gaebe	David W. Bopp	
E. E. Geisel	Harry Brandman	
Antonio Giorgi	Frank R. Doll	
Adolph Goldstone	Clementine Frankowski	
Joseph Goldstone	Jeremiah A. McCarthy	
G. S. Greene	Clifford M. Jones	
A. F. Gregoline	L. T. Kudele	
B. F. Gumbiner	A. J. Lauer	
F. A. Gutierrez	Jno. A. Melyn	
C. M. Harless	Harry Silvian	
A. T. Harris	Theodore J. Smith	
R. M. Hedrick	L. J. Wisch	
M. Herscheder	Lowell	
L. B. Johnson	Neal Davis	
Harry L. Kahan	Franklin Petry	
A. M. Kan	Griffith	
Mikes N. Kalavios	F. A. Malmstone	
F. J. Kendrick	LAPORTE COUNTY	
Geo. J. Koletts	Laporte	
Arnold L. Lieberman	C. E. Burleson	
B. W. Marshall	E. F. W. Crawford	
F. J. McMichael	C. B. Danruther	
Frank W. Merritt	J. H. Fargher	
Ira Miltimore	R. B. Jones	
O. B. Nesbit	J. N. Kelly	
Oliver S. Olson	Robert M. Kelsey	
H. C. Parker	G. W. Kimball	
Bertha Rose	James Kistler	
H. J. Ryan	G. O. Larson	
E. L. Schaible	E. E. Linn	
T. J. Senese	W. B. Martin	
Michael Shellhouse	S. P. Morgan	
E. D. Skeen	W. W. Ross	
C. M. Stoycoff	A. R. Simon	
T. B. Templin	R. F. Wileox	
G. L. Verplank	Michigan City	
James P. Vye	E. G. Blinks	
A. A. Watts	Harry A. Briggs	
R. O. Wharton	H. L. Brooks	
J. M. White	F. M. Fargher	
W. J. White	J. H. Foster	
O. C. Wicks	R. A. Gilmore	
Robt. N. Wimmer	J. J. Kerrigan (H)	
C. W. Yarrington	R. L. Kerrigan	
P. S. Yocom	Aimee R. Killough	
Hammond		
W. M. Bigger	George M. Krieger	
J. T. Bolin	F. V. Martin	
Fred Braginton	R. C. Norton	
W. A. Buchanan	J. R. Phillips	
Jos. F. Carlo	Leonard F. Piazza	
B. W. Chidlaw	J. D. Price	
J. F. Clancy	Nelle C. Reed	
H. G. Cole	N. C. Reglins	
G. M. Cook	Lawrence M. Robrock	
C. H. Crews	J. B. Rogers	
Alice H. Davis	L. E. Stephenson	
H. W. Detrick	Frank R. Warren	
H. W. Eggers	P. H. Weeks	
Ray Elledge	L. A. Wilson	
D. C. Emenhisier	Rolling Prairie	
J. L. Emenhisier	C. W. Brown	
N. K. Forster	Hanna	
F. H. Fox	H. A. Garner	
M. B. Gevirtz	Wanatah	
A. H. Hansen	Chas. E. Mayfield	
H. S. Hicks	Lacrosse	
Andrew Hofmann	D. D. Oak	
W. A. Hornaday	LAWRENCE COUNTY	
W. H. Howard	Bedford	
E. S. Jones	L. H. Allen	
R. W. Kretsch	Norman R. Byers	
Hedwig S. Kuhn	Joseph Dusard	
Hugh A. Kuhn	Charles B. Emery	
A. W. Lloyd	Chas. H. Emery	
Chas. B. Matthews	Frank D. Martin	
O. O. Melton	W. Harold McKnight	
Lindsay Morrison	A. E. Newland	
Richard B. Nelson	H. C. Ragsdale	
Wm. K. Newcomb	M. O. Robertson	
Louis Nodinger	Morrell E. Simpson	
T. W. Oberlin	Robt. B. Smallwood	
R. O. Ostrowski		
J. R. Pugh		
C. W. Rauschenbach		
A. W. Rhind		
Perry Q. Row		
Homer		
J. C. Miller	Pendleton	
Web Feck	C. E. Stone	
Hawthorne		
L. E. Alexander	John S. Woolery	
E. E. Hunt	R. E. Wynne	
A. T. Jones	Mitchell	
C. P. McLaughlin	James D. Byrns	
Hawthorne		
J. R. Hamilton	John A. Gibbons	
Walter C. Sherwood	J. R. Hamilton	
Hawthorne		
Heltonville		
Jasper Cain	Walter C. Sherwood	
Hawthorne		
Ooltic		
Claude Dollens	James D. Byrns	
Williams		
J. T. McFarlin	John A. McFarlin	
Williams		
MADISON COUNTY		
Alexandria		
J. L. Carpenter	C. E. Stone	
J. J. Gibson	John S. Woolery	
F. G. Keller	R. E. Wynne	
Williams		
J. T. McFarlin	J. T. McFarlin	
MADISON COUNTY		
Anderson		
C. L. Armington	C. L. Armington	
John C. Armington	Robert Armington	
Robert Armington	M. A. Austin	
Anderson		
Kenneth D. Ayres	Kenneth D. Ayres	
C. H. Brauchla	C. H. Brauchla	
E. E. Brock	Etta Charles	
Etta Charles	A. W. Collins	
A. W. Collins	E. M. Conrad	
E. M. Conrad	Rex Dixon	
Rex Dixon	John C. Drake	
John C. Drake	A. D. Erhart	
A. D. Erhart	H. W. Gante	
H. W. Gante	F. C. Guthrie	
F. C. Guthrie	Harry G. Hockett	
Harry G. Hockett	Lee Hunt	
Lee Hunt	Thomas M. Jones	
Thomas M. Jones	B. A. King	
B. A. King	Jack King	
Jack King	O. A. Kopp	
O. A. Kopp	E. D. Knight	
E. D. Knight	P. T. Lamey	
P. T. Lamey	Sam W. Litzenberger	
Sam W. Litzenberger	J. A. Long	
J. A. Long	V. G. McDonald	
V. G. McDonald	O. E. McWilliams	
O. E. McWilliams	Doris Meister	
Doris Meister	George B. Metcalf	
George B. Metcalf	W. M. Miley	
W. M. Miley	Paul Leon Nelson	
Paul Leon Nelson	L. L. Nesbit	
L. L. Nesbit	D. S. Quickel	
D. S. Quickel	Clarence V. Rozelle	
Clarence V. Rozelle	W. L. Sharp	
W. L. Sharp	T. J. Stephenson	
T. J. Stephenson	S. J. Stottlemeyer	
S. J. Stottlemeyer	J. R. Tracy	
J. R. Tracy	G. B. Wilder	
G. B. Wilder	F. M. Williams	
F. M. Williams	C. L. Willson	
C. L. Willson	F. B. Wishard	
F. B. Wishard	R. O. Zierer	
R. O. Zierer	Elwood	
Elwood		
Perry Cotton	Perry Cotton	
J. E. Culipper	J. E. Culipper	
R. N. Filatreau	R. N. Filatreau	
H. W. Fitzpatrick	H. W. Fitzpatrick	
W. H. Hoppenwrath	W. H. Hoppenwrath	
W. M. Hoppenwrath	W. M. Hoppenwrath	
W. A. Laudemann	W. A. Laudemann	
R. R. Plouffe	R. R. Plouffe	
Frankton		
J. C. Miller	J. C. Miller	
Web Feck	Web Feck	
Pendleton		
L. E. Alexander	L. E. Alexander	
E. E. Hunt	E. E. Hunt	
A. T. Jones	A. T. Jones	
C. P. McLaughlin	C. P. McLaughlin	
Summitville		
Seth Irwin	Seth Irwin	
L. F. Mobley	L. F. Mobley	
Lapel		
John I. Rinne	John I. Rinne	
Markleville		
D. N. Conner	D. N. Conner	
Marion County		
Indianapolis		
D. S. Adams	D. S. Adams	
H. C. Adkins	H. C. Adkins	
Henry R. Alburger	Henry R. Alburger	
Howard Aldrich	Howard Aldrich	
H. R. Allen	H. R. Allen	
Wm. F. Allison	Wm. F. Allison	
E. O. Alviss	E. O. Alviss	
E. M. Amos	E. M. Amos	
D. A. Anderson	D. A. Anderson	
R. J. Anderson	R. J. Anderson	
E. G. Anthony	E. G. Anthony	
R. L. Arbuckle	R. L. Arbuckle	
Wm. E. Arbuckle	Wm. E. Arbuckle	
Sidney S. Aronson	Sidney S. Aronson	
J. A. M. Aspy	J. A. M. Aspy	
A. S. Ayres	A. S. Ayres	
Max A. Bahr	Max A. Bahr	
O. H. Bakemeier	O. H. Bakemeier	
James F. Balch	James F. Balch	
Revel F. Banister	Revel F. Banister	
H. M. Banks	H. M. Banks	
M. J. Barry	M. J. Barry	
D. A. Bartley	D. A. Bartley	
G. W. Batman	G. W. Batman	
Robert R. Beach	Robert R. Beach	
Paul Beard	Paul Beard	
T. J. Beasley	T. J. Beasley	
Norman M. Beatty	Norman M. Beatty	
Wm. S. Beck	Wm. S. Beck	
H. F. Beckman	H. F. Beckman	
R. C. Beeler	R. C. Beeler	
L. D. Belden	L. D. Belden	
Henry I. Berger	Henry I. Berger	
J. K. Bernan	J. K. Bernan	
D. F. Berry	D. F. Berry	
M. E. Beverland	M. E. Beverland	
L. D. Bibler	L. D. Bibler	
Charles R. Bird	Charles R. Bird	
John J. Boaz	John J. Boaz	
E. F. Boggs	E. F. Boggs	
C. B. Bohner	C. B. Bohner	
George S. Bond	George S. Bond	
Daniel L. Bower	Daniel L. Bower	
Geo. W. Bowman	Geo. W. Bowman	
Floyd A. Boyer	Floyd A. Boyer	
W. V. Boyle	W. V. Boyle	
John R. Brayton	John R. Brayton	
Archie E. Brown	Archie E. Brown	
A. S. Brown	A. S. Brown	
Eward A. Brown	Eward A. Brown	
Frances T. Brown	Frances T. Brown	
L. W. Brown	L. W. Brown	
Walter L. Bruetsch	Walter L. Bruetsch	
Louis Burkhardt	Louis Burkhardt	
E. E. Cahal	E. E. Cahal	
H. F. Call	H. F. Call	
J. W. Canaday	J. W. Canaday	
Wayne Carson	Wayne Carson	
Amos Combs	Amos Combs	
Elizabeth S. Conger	Elizabeth S. Conger	
Jos. L. Conley	Jos. L. Conley	
Glenn Conway	Glenn Conway	
Robert E. Conway	Robert E. Conway	
J. W. Cooper	J. W. Cooper	
S. J. Copeland	S. J. Copeland	
M. Cornacchione	M. Cornacchione	
Thomas A. Cortese	Thomas A. Cortese	
Thomas E. Courtney	Thomas E. Courtney	
C. E. Cox	C. E. Cox	
Homer W. Cox	Homer W. Cox	
K. L. Craft	K. L. Craft	
F. W. Cregror	F. W. Cregror	
Clyde G. Culbertson	Clyde G. Culbertson	
Paul K. Cullen	Paul K. Cullen	
C. H. Cunningham	C. H. Cunningham	
J. M. Cunningham	J. M. Cunningham	
John E. Dalton	John E. Dalton	
J. C. Daniel	J. C. Daniel	
N. Cort Davidson	N. Cort Davidson	
C. W. Day	C. W. Day	
John Day	John Day	
Michael F. Dean	Michael F. Dean	
R. M. Dearmin	R. M. Dearmin	
Murray DeArmond	Murray DeArmond	
Blan F. Deer	Blan F. Deer	

W. J. Dieter	J. W. Jackson	H. O. Mertz	J. H. Smiley	Lawrence
C. Bowen DeMotte	H. A. Jacobs	H. B. Mettel	David L. Smith	K. H. Stephens
Dwight DeWeese	A. S. Jaeger	A. J. Michel	E. Rogers Smith	Southport
J. W. Denny	O. S. Jaquith	H. N. Middleton	Francis C. Smith	Morris B. Paynter
W. L. Dorman	K. I. Jeffries	J. Don Miller	Fred C. Smith	Wanamaker
Frank T. Dowd	W. O. Jenkins	Wm. T. Miller	James M. Smith	George Jones
William M. Dugan	Wm. L. Jennings	Earl H. Mitchell	Lester A. Smith	MARSHALL COUNTY
Thomas J. Dugan	C. H. Jinks	R. E. Mitchell	Roy Lee Smith	Argos
Harold Dunlap	James E. Jobes	W. P. Moenning	Wilbur F. Smith	F. H. Kelly
L. M. Dunning	N. E. Jobes	W. F. Molt	Byron Snider	H. M. McCracken
E. W. Dyar, Jr.	A. S. Johnson	B. B. Moore	R. A. Solomon	Robt. B. Miller
J. Rilus Eastman	Roy W. Johnson	R. M. Moore	Martha C. Souter	W. C. Sarber
J. Wayne Ebert	T. B. Johnson	Chas. A. Morgan	J. W. Sovine	Culver
J. H. Eberwein	David E. Jones	H. G. Morgan	Chas. R. Sowder	Paul A. Campbell
C. L. Eisaman	M. V. Kahler	Walter P. Morton	Alan L. Sparks	Richard H. Appel
Roy Egbert	D. O. Kearby	R. H. Moser	M. J. Spencer	C. G. Mackey
Bert Ellis	T. V. Keene	M. H. Mothersill	Mary A. Spink	Donald Reed
Chas. P. Emerson	S. H. Keeney	J. E. Moutoux	Urbana Spink	H. H. Tallman
John T. Emhardt	C. H. Keever	A. E. Mozingo	Russell J. Spivey	Plymouth
John W. Emhardt	Don E. Kelly	Lillian B. Mueller	Carl B. Sputh	C. H. Bockoven
L. A. Ensminger	V. D. Keiser	E. B. Mumford	James B. Stalker	Ida L. Eby
Bernhard Erdman	J. F. Kelly	Chas. W. Myers	C. A. Stayton	Thomas C. Eley
C. Basil Fausset	Walter F. Kelly	R. V. Myers	Walter Stoefler	C. F. Holtendorff
J. Louis Fichman	R. J. Kemper	C. A. Nafe	Jos. L. Storey	C. A. Inks
Frank B. Fisk	G. F. Kempf	Louis T. Need	Tyler J. Stroup	P. R. Irey
J. O. Flora	Wm. H. Kennedy	A. S. Neely	J. H. Stygall	F. G. Perry
D. W. Fosler	H. R. Kerr	O. C. Neier	John R. Surber	T. R. Possolt
Harry L. Foreman	John F. Kerr, Jr.	T. B. Noble, Jr.	C. C. Taylor	Harry Knott
Frank Forry	Jane M. Ketcham	T. B. Noble, Sr.	F. W. Taylor	R. Clarence Stephens
P. J. Fouts	E. N. Kime	H. F. Nolting	J. M. Taylor	L. W. Vore
A. G. Funkhouser	Wm. E. King	O. B. Norman	Merrel H. Taylor	Bremen
Elmer Funkhouser	J. K. Kingsbury	H. L. Norris	Frank Teague	Wallace Buchanan
R. M. Funkhouser	E. F. Kiser	A. A. Ogle	B. J. Terrell	E. Lee Burrous
Paul C. Furgason	Harry E. Kitterman	Frank W. Oliphant	Joseph O. Thayer	R. H. Draper
S. A. Furniss	Benj. Victor Klain	C. E. Orders	A. A. Thomas	Bourbon
William E. Gabe	F. C. Klein	Harry S. Osborne	C. F. Thompson	Cova R. Graham
Euclid T. Gaddy	Geo. Kohlstaedt	R. C. Ottinger	Harold C. Thornton	F. E. Radcliffe
George J. Garceau	Kenneth G. Kohlstaedt	F. V. Overman	J. R. Thrasher	Tyner
William Garner	Karl M. Koons	J. E. Owen	A. L. Thurston	A. A. Thompson
John D. Garrett	L. H. Kornafel	E. E. Padgett	H. F. Thurston	MIAMI COUNTY
J. A. Garrettson	Bennett Kraft	John F. Parker	H. S. Thurston	Peru
W. P. Garshwiler	Herman W. Kuntz	Martin T. Patton	W. E. Tinney	E. H. Andrews
F. M. Gastineau	Fred B. Kurtz	Lyman R. Pearson	W. B. Tinsley	J. B. Berkebile
W. D. Gatch	I. J. Kwitny	A. C. Pebworth	O. N. Torian	O. U. Carl
Julius H. P. Gauss	Napoleon LaBonte	James T. Pebworth	Victor F. Tremor	B. F. Eikenberry
Roy A. Geider	E. B. Lamb	W. E. Pennington	H. M. Trusler	Donald W. Ferrara
Herman Gick	V. A. Lapenta	R. J. D. Peters	H. A. VanOsdel	S. J. Ferrara
F. E. Gifford	Bernard J. Larkin	T. V. Petranoff	C. F. Voyles	Cloyn R. Herd
J. E. Gillespie	George F. Lawler	B. B. Pettijohn	J. Thayer Waldo	O. R. Lynch
L. H. Gilman	Daniel W. Layman	F. L. Pettijohn	E. De Wolfe Wales	F. M. Lynn
R. L. Glass	J. K. Leasure	Dudley Pfaff	F. C. Walker	S. D. Malouf
J. L. Glendenning	H. L. Leatherman	J. A. Pfaff	Robert K. Walker	O. C. Wainscott
H. W. Goss	John Leech	C. A. Pfafflin	Fredrick C. Warfel	J. E. Yarling
A. B. Graham	Henry S. Leonard	Jack E. Pilcher	J. M. Warvel	Amboy
N. P. Graham	Leon Levi	Willis Pugh	E. S. Waymire	E. E. Shrock
J. J. Gramling	J. R. Lewis	Harry S. Rabb	John W. Webb	Bunker Hill
John W. Graves	M. B. Light	F. B. Ramsey	J. O. Wehrman	E. W. Bailey
Oliver Greer	E. O. Lindenmuth	J. V. Reed	H. J. Weil	Chili
John H. Greist	E. L. Lingeman	Philip B. Reed	Chas. A. Weller	H. E. Line
G. W. Gustafson	Goethe Link	Chas. A. Reid	A. F. Weyerbacher	Converse
Carl Habich	J. J. Littell	Frank P. Reid	Homer H. Wheeler	Fred Malott
Claude E. Hadden	E. O. Little	Simon Reisler	J. T. Wheeler	Denver
Murray N. Hadley	W. D. Little	Theo. D. Rhodes	Joel Whitaker	A. S. Newell
Edmund B. Haggard	John W. Little	Thurman B. Rice	John M. Whitehead	J. W. Newell
E. V. Hahn	R. L. Lochry	J. W. Ricketts	Irwin W. Wilkins	Mexico
Franklin T. Hallam	W. H. Long	J. F. Rigg	Luther Williams	C. F. Rendel
H. G. Hamer	Norman S. Loomis	I. W. Riggins	Matthew Winters	Miami
T. A. Hanna	G. C. Lord	E. B. Rinker	Wm. Wise	James B. Shoemaker
O. P. Hannebaum	George E. Lowe	J. O. Ritche	Wm. N. Wishard	MONROE COUNTY
A. K. Harcourt	F. J. H. Luck	Ray Robertson	Wm. N. Wishard, Jr.	Bloomington
Myron S. Harding	Oscar D. Ludwig	L. C. Robbins	George Wood	F. H. Austin
E. H. Hare	Emery D. Lukenbill	Clarke Rogers	Wm. V. Woods	F. H. Batman
A. H. Harold	J. A. McDonald	Thomas P. Rogers	Cecil S. Wright	R. M. Borland
N. E. Harold	D. E. MacGregor	C. W. Roller	J. W. Wright	W. N. Culmer
V. K. Harvey	H. L. Magennis	Bernard D. Rosenak	John E. Wytenbach	R. A. Demotte
S. J. Hatfield	Marlow W. Manion	D. Hamilton Row	C. B. Yott	Dillon Geiger
Everett Hays	A. L. Marshall	Geo. S. Row	G. M. Young	Chas. Holland
H. H. Heinrichs	Albert L. Marshall, Jr.	Milton M. Rubin	J. B. Young	D. J. Holland
John D. Hendricks	C. R. Marshall	Karl R. Ruddell	John M. Young	J. E. P. Holland
John W. Hendricks	J. A. Martin	C. L. Rudesill	W. S. Zarick	Phillip Holland
Russell S. Henry	C. W. Marxer	Ernest Rupel	Oaklandon	D. L. Lutes
A. M. Hetherington	J. Melvin Masters	Byron K. Rust	Chas. J. Kneer	J. E. Luzadder
Walter Hickman	R. J. Masters	Martin L. Ruth	Wm. McQueen	Robt. Lyons
James M. Himler	B. J. Matthews	C. W. Rutherford	Morris Thomas	C. H. Marchant
Ulis B. Hine	R. O. McAlexander	Charles D. Ryan	New Augusta	J. E. Moser
Russell Hippenstein	James S. McBride	Glen V. Ryan	E. O. Asher	B. D. Myers
Fletcher Hodges	Wm. A. McBride	Russell Sage	G. A. Coble	Margaret T. Owen
Francis T. Hodges	Joseph C. McCallum	Wm. A. Sandy	Beech Grove	M. F. Poland
J. Wm. Hofmann	D. J. McCarthy	C. R. Schaefer	R. W. Blackford	
A. A. Hollingsworth	C. H. McCaskey	E. W. Scheier	Raymond Butler	
J. E. Holman	J. F. McCool	A. J. Schneider	Y. D. Kim	
Robert D. Howell	C. O. McCormick	Ada E. Schweitzer	James C. Rhea	
Foster J. Hudson	P. E. McCown	Albert Seaton	Bridgeport	
J. E. Hughes	C. B. McCulloch	G. W. Seaton	F. L. Hade	
W. F. Hughes	E. C. McDonald	Herbert L. Sedam	Castleton	
L. B. Hurt	Chas. J. McIntyre	Louis H. Segar	C. C. McFarlin	
Paul T. Hurt	H. R. McKinstry	S. Kenosha Sessions		
Bernard Hyman	John D. McLeay	Wm. Shimer		
Paul G. Iske	Charles McNaull	L. L. Shuler		
F. E. Jackson	Ralph J. McQuiston	O. W. Sicks		
G. B. Jackson	Lyman T. Meiks	J. S. Skobba		
J. L. Jackson	W. E. Mendenhall	D. H. Sluss		

Hugh Ramsey	C. F. Hardy	Montezuma	PULASKI COUNTY	RUSH COUNTY
Wm. C. Reed	I. H. Lawson	Winamac	Winamac	Rushville
Floyd Rogers	F. W. Messer	Bloomingdale	Thos. E. Carnal	C. C. Atkins
R. C. Rogers	C. E. Munk	St. Bernice	Medaryville	J. F. Bowen
Ben R. Ross	J. D. Seybert	S. I. Green	R. P. Hackley	Donald I. Dean
Melville Ross	H. O. Williams	Perryville	C. E. Linton	F. H. Creen, Sr.
R. D. Smith	S. J. Young	Newport	Monterey	F. H. Creen, Jr.
C. C. Stroup	Ligonier	J. L. Saunders	A. J. Kelsey	Lowell M. Green
Harry B. Thomas	F. W. Black	Rosedale	PUTNAM COUNTY	R. O. Kennedy
Frank T. Tourner	J. B. Schutt	C. S. White	Cloverdale	John M. Lee
W. T. Van Dament	W. A. Shobe (H)	PERRY COUNTY	Clyde Gray	H. V. Logan
T. L. Wilson	T. N. Siersdorfer	Cannelton	E. M. Hurst	H. P. Metcalf
James W. Wiltshire	Q. F. Stultz	Tell City	Greencastle	J. C. Sexton (H)
Homer Woolery	Wolfake	Porter J. Coulitas	J. F. Gillespie	Roy E. Shanks
Ellettsville	H. A. Luckey	David Dukes	W. R. Hutcheson	C. L. Smullen
R. C. Austin	J. E. Luckey	W. M. O'Brien	C. B. O'Brien	J. E. Walther
Smithville	R. C. Luckey	N. A. James	W. M. McCaughey	E. I. Wooden
G. L. Mitchell	Cromwell	Bristow	Gilbert D. Rhea	Carthage
MONTGOMERY COUNTY	Avilla	S. L. Apple	C. C. Tucker	William S. Coleman
Crawfordsville	J. H. Nye	Troy	Earle V. Wiseman	G. B. McNabb
T. Z. Ball	A. J. Rarick	Leopold	Roachdale	Manilla
G. A. Collett	K. D. Sneary	E. R. Snyder	C. C. Collins	Emerson Barnum
Thomas L. Cooksey	Wm. Veazey	J. E. Taylor	Dick J. Steele	Glenwood
Fred N. Daugherty	Laotto	PIKE COUNTY	C. N. Stroubé	W. R. Phillips
L. H. Davis	W. D. Barnhill	Petersburg	Bainbridge	Richland
Fred A. Dennis	French Lick	J. T. Kime	Lester W. Veach	W. P. Jolly
Wemple Dodds	George R. Dillinger	A. R. Logan	Putnamville	ST. JOSEPH COUNTY
J. B. Griffith	J. R. Dillinger	T. R. Rice	George Tennis	Mishawaka
H. A. Kinman	C. D. Fulkerson	Winslow	RANDOLPH COUNTY	
Byron N. Lingeman	Orleans	C. B. DeTar	Farmland	
A. L. Loop	Robert E. Baker	Velpen	O. E. Current	
Robt. Millis	W. H. Patton	D. E. Taylor	Russell B. Engle	
John L. Sharp	Wm. E. Schoolfield	PORTER COUNTY	Byron Nixon	
W. L. Straughn	Oscar H. Stewart	Hebron	Union City	
Hawthorne C. Wallace	W. S. Workman	W. C. Butman	Leroy B. Chambers	
G. T. Williams	Paoli	F. J. Kleinman	George H. Davis	
Darlington	Ivan A. Clark	Valparaiso	L. K. Phipps	
J. B. Cushman	R. L. Holaday	J. C. Brown	Robert W. Reid	
Robert R. Pollom	John I. Maris	P. M. Corboy	Fred Ruby	
Ladoga	S. F. Teaford	Carl M. Davis	R. A. Voisinet	
Frank T. Denny	West Baden	C. H. Dewitt	Winchester	
Maurice E. Cross	Clarence E. Boyd	A. O. Dobbins	I. E. Brenner	J. A. Abel
Wingate	Mart Hassenmiller	C. R. Douglas	Wm. E. Callison	Robt. B. Acker
F. D. Allhands	H. L. Miller	Ralph C. Eades	W. S. Dininger	G. B. Allen
Waynetown	Leipsic	J. R. Frank	L. W. Painter	E. K. Ayling
H. M. Bounell	G. G. Colglazier	E. H. Miller	J. S. Rohison	W. H. Baker
A. S. Faulkner	OWEN COUNTY	E. H. Powell	Parker	Morris Balla
New Richmond	Spencer	H. O. Seipel	P. C. Barnard	J. B. Berteling
H. D. Kindell	Coal City	G. H. Stoner	William Deutsch	David A. Bickel
Waveland	Boaz Yocom	Arthur J. Van Winkle	Modoc	P. J. Birmingham
Jas. Noblitt	Patricksburg	Chesterton	Wayne Harmon	Chas. A. Bishop
New Ross	R. H. Richards	R. H. Axe	Ridgeville	Erwin Blackburn
Charles Riley	Gosport	J. W. Dale	Arvin Henderson	B. J. Bolka
Russellville	Clinton	W. M. Parkinson	C. W. Mullikin	L. A. Bolling
E. E. Richards	Parke-Vermilion COUNTIES	Kounts	Lynn	John C. Boone
MORGAN COUNTY	Casebeer	S. E. Dittmer	L. E. Jordan	C. S. Bosenbury
Martinsville	Paul B. Casebeer	Porter	C. E. Martin	Harry Boyd-Snee
P. M. Alexander	W. D. Gerrish	C. C. Kasdorf	J. M. Wallace	Fred W. Buechner
C. G. Bothwell	D. C. Shaft	POSEY COUNTY	Saratoga	C. F. Bussard
H. H. Dutton	J. F. Swayne	Cynthiana	Stanley A. Clark	C. S. Campbell
Robert Egbert	C. M. White	J. E. Gudgel	Wm. H. Clark	F. R. Nicholas Carter
Leon Cray	I. D. White	S. B. Montgomery	David H. Condit	J. V. Cassady
Edw. M. Pitkin	C. M. Zink	Mt. Vernon	H. L. Cooper	F. R. Clapp
M. C. Pitkin	Dana	Arthur Whittle	C. B. Crumpacker	R. B. Dugdale
Geo. L. Sandy	Wm. C. Myers	Bine Whittle	J. A. Duggan	J. A. Duggan
S. P. Scherer	A. E. Sabin	I. A. Whittle	Charles Eisenbeiss	Charles Eisenbeiss
Austin D. Sweet	Rockville	Osgood	Alfred Ellison	Ladislaus Faltin
H. R. Willan	J. R. Bloomer	J. C. Bigham	J. H. Fears	J. H. Fears
Mooresville	T. J. Collings	J. T. Carney	C. M. Fish	C. M. Fish
Charles Aker	E. H. Dowell	Milan	Lawrence F. Fisher	Lawrence F. Fisher
Kenneth Comer	Walter A. Foreman	Arthur Whittle	L. L. Frank	L. L. Frank
J. E. Comer	Casper Harstad	Bine Whittle	DeVon W. Frash	DeVon W. Frash
W. J. Stangle	J. V. Pace	I. A. Whittle	Gladys D. Frith	Gladys D. Frith
Brooklyn	H. B. Pirkle	New Harmony	Louis C. Frith	Louis C. Frith
L. M. Hughes	Blanford	H. E. Ropp	George S. Row	Geo. J. Geisler
Paragon	John W. Clubb	H. C. Rininger	R. Lee Smith	M. M. Gilman
G. S. Silliman	Cayuga	Poseyville	Surman	A. S. Giordano
Morgantown	John W. Clubb	Paul Boren	Chas. F. Fletcher	J. M. Gordon
M. G. Murphy	C. B. Goodwin	S. W. Boren	Holton	George F. Green
NOBLE COUNTY	J. R. Nash	A. L. Woods	E. B. Gall	Donald Grillo
Allbion	Kendallville	Wadesville	Versailles	Paul E. Haley
W. F. Carver	R. E. Brown	Chas. Arhurn	L. H. Hopkins	Vachel E. Harmon
J. W. Morr	S. C. Darroch		Lowell C. Hunter	H. W. Helmen
J. R. Nash			Wm. M. Loehr	John W. Hilbert
C. B. Goodwin				J. W. Hill
Richard R. Gutstein				Marion W. Hillman

W. H. Hillman	Fairland	R. R. Calvert	C. S. Baker	J. F. Wynn
R. V. Hoffman		O. U. Chenowith	Herman Baker	C. W. Yeck
Lillian S. Holdeman	M. M. Wells	G. R. Clayton	J. S. Baker	P. E. Yunker
R. W. Holdeman	SPENCER COUNTY	Ira Cole	I. C. Barclay	Armstrong
A. D. Huffman	Roekport	A. B. Coynor	William E. Barnes	William N. Wilhelmus
Carroll Hyde	Eva J. Buxton	W. T. Cox	Bruce H. Beeler	
Bernard A. Kamm	C. D. Ehrman	F. S. Crockett	Stella Boyd	VIGO COUNTY
Arthur L. Knapp	J. C. Glackman	Edward C. Davidson	C. R. Buikstra	Riley
Kenneth T. Knode	Newtonville	C. V. Davison	Wm. C. Caldwell	
A. A. Kramer	H. T. Harter	G. R. Donahue	Grace Kaufman	C. M. DuPuy
E. J. Lent	Dale	M. J. Eaton	A. F. Clements	Virgil French
N. S. Lindquist	Claude Lomax	Russell A. Flack	Walter R. Cleveland	Norman Silverman
Martha B. Lyon	John H. Barrow	M. G. Frasch	Herman Combs	Terre Haute
M. W. Lyon	Lamar	Thos. G. Graham	Pearl B. Combs	
C. M. Malstaff	N. L. Medcalf	O. E. Greist	W. H. Coleman	O. O. Alexander
J. E. McMeel	Chrisney	Frank Hall	Earl Conover	Orris T. Allen
Milo Miller	C. L. Springstun	G. W. Herrold	Paul D. Crimm	W. C. Anderson
William E. Miller	St. Meinrad	L. J. Holaday	C. W. Culhane	C. W. Asbury
H. F. Mitchell	V. V. Schriefer	F. P. Hunter	Wm. D. Davidson	W. D. Asbury
H. T. Montgomery (H)	STARKE COUNTY	Charles Hupe (H)	W. R. Davidson	E. R. Baldridge
E. P. Moore	North Judson	R. G. Ikins	E. K. Denzer	W. O. Baldridge
C. A. Mott	Albert Fisher	Chas. B. Kern	H. S. Dieckman	H. L. Bernheimer
E. E. Parker	STEUBEN COUNTY	H. E. Klepinger	Thomas Dobbins	M. J. Bonham
Thomas B. Pauszek	Angola	Manson M. Lairy	H. S. Dome	E. B. Boots
Andrew Petrasz	D. W. Creel	H. J. Laws	Geo. C. Dunlevy	Henry W. Bopp
Harold D. Pyle	L. L. Eberhart	Guy P. Levering	W. S. Ehrlich	Stephen C. Bradley
Herman H. Rodin	S. S. Frazier	F. A. Loop	Sidney J. Eichel	Paul J. Bronson
George M. Rosenheimer	Katherine Jackson	F. A. Loop, Jr.	Henry J. Faul	A. L. Cabell
Ruth F. Rasmussen	W. H. Lane	H. G. Martin	W. H. Field	A. H. Caffee
E. L. Rigley	O. H. Swantusch	C. C. McArdle	C. J. Folz	G. C. Carpenter
Robert B. Sanderson	W. F. Waller	D. C. McClelland	Wm. G. French	A. W. Cavins
Isadore Sandock	Fremont	D. H. McKinney	L. E. Fritsch	Chas. N. Combs
Harry H. Sandoz	B. A. Blosser	Adal McMahon (H)	H. M. Garrison	G. C. Congleton
Louis A. Sandoz	Pleasant Lake	John S. Morrison	John H. Hare	J. J. Connally
C. E. Savery	G. N. Lake	Samuel Pearlman	F. Minton Hartz	J. H. Cook
Keith E. Selby	Helmer	F. L. Pyke	A. M. Hayden (H)	W. G. Crawford
C. M. Sennett	R. D. Denman	Frank W. Ratcliff	John Haynes	O. G. Cruikshank
R. L. Sensenich	SULLIVAN COUNTY	Wm. M. Reser	Wm. F. Healy	Claude A. Curry
Anna G. Seyler	Carlisle	F. T. Romberger	C. C. Herzer	J. E. Daily
H. B. Shedd	J. S. Brown	C. H. Rommel	Warren W. Hewins	R. J. Danner
P. G. Skillern	Charles E. Whippes	C. L. Rowland	J. N. Jerome	H. B. Decker
H. H. Slominski	Dugger	E. B. Ruschil	G. C. Johnson	James E. Donnelly
R. W. Spenner	E. M. Deputy	A. W. Schreiber	Stephen L. Johnson	Robt. E. Downing
A. M. Sullivan	F. M. Dukes	J. W. Shafer	H. M. Kaufman	Rudolph Duenweg
C. C. Terry	Farmersburg	L. O. Sholty	Bleeker Knapp	Eugene Eisenlohr
Ray H. Thomas	Harry O'Dell	Harper G. Sichler	Shirley C. Lang	D. H. Forsyth
Maurice J. Thornton	J. T. Oliphant	L. C. Smith	C. S. Laubscher	J. E. Freed
P. C. Traver	Shelburn	Edward Stahl	Clarence Laubscher	J. O. Garrigus
Henry E. Vitou	Vincent R. Lazo	J. W. Strayer	S. R. Laubscher	D. A. Gerrish
W. G. Wegener	J. H. Work	H. N. Swezey	C. E. Laughlin (H)	Ivan Gilbert
J. L. Wilson	Sullivan	G. A. Thomas	W. J. Laval	John R. Gillum
North Liberty	Marion H. Bedwell	Geo. R. Tubbs	Chas. F. Leich	R. G. Harkness
John J. Hardy	J. M. Billman	Earl Van Reed	Jesse R. Logan	E. R. Haslem
Lakeville	C. F. Briggs	W. B. Washburn	Harold D. Lynch	J. H. Hauck
John T. How	E. M. Corbin	R. B. Wetherill	Paul Lynch	D. A. Hoover
Louis E. How	James H. Crowder	C. M. Wray	C. G. Macer	J. J. Hoover
Ossocula	J. R. Crowder	West Lafayette	Pierce MacKenzie	Edgar J. Hunt
H. L. Warrick	Paul Higbee	H. H. Ash	E. F. Magenheimer	W. B. Hunt
Walkerton	J. B. Maple	J. C. Burkle	D. V. McClary	B. M. Hutchings
C. D. Linton	G. D. Scott	Louise J. Meikle	J. C. McClurkin (H)	F. H. Jett
New Carlisle	W. N. Thompson	S. J. Miller	W. E. McCool	A. F. Knoefel
H. M. Hall	Fairbanks	Battle Ground	J. D. McDonald	Joseph Kunkler
J. E. Luzadder, Jr.	H. E. Bland	Frank M. Biddle	Walter McDowell	Wm. C. Kunkler
SCOTT COUNTY	Hymera	Romney	Leonard K. McMurry	C. Russell LaBier
Seotsburg	C. U. Thralls	O. L. McCay	K. T. Meyer	Clarence R. LaBier
Marvin McClain	Merom	E. T. Mitchell	Milton Miller	A. H. Lee
Floyd Napper	John W. Wonter	Clark's Hill	Minor Miller	C. L. Luckett
J. P. Wilson	SWITZERLAND COUNTY	H. M. Mugg	Victor H. Mino	L. A. Malone
SHELBY COUNTY	Vevay	West Point	Marion Morgan	E. L. Mattox
Shelbyville	Fred C. Bakes	J. E. Alexander	Adeline F. Muelchi	E. C. McBride
F. E. Bass	L. H. Bear	Carl J. Trout	Henry Nenneker	Noel S. McBride
R. W. Gehres	G. W. Copeland	Colburn	A. E. Newman	F. G. McCarthy
Herbert Inlow	R. M. Copeland	Robert H. Wagoner	J. W. Phares	W. C. McCormick
C. Fred Inlow	Geo. E. Ellenbrook	TIPTON COUNTY	Walter Pollard	James W. McEwen
W. D. Inlow	Patriot	Tipton	Isadore J. Raphael	D. B. Miller
B. G. Keeney	M. N. Daubenbeyer	A. E. Burkhardt	Bernard Ravidin	W. H. Miller
Samuel Kennedy	Lafayette	B. A. Burkhardt	Marcus Ravidin	Albert M. Mitchell
Walter McFadden	R. E. Ellenbrook	J. V. Carter	T. F. Reitz	James J. Moorhead
R. M. Nigh	P. R. Tindall	R. L. Fullerton	Clifford Richey	H. M. Mullikin
L. C. Sammons	W. R. Tindall	H. E. Grinshaw	W. H. Reitz	G. G. Musselman
C. A. Tindall	W. W. Tindall	G. H. Warne	Geo. M. Royster	E. O. Nay
P. R. Tindall	Waldron	Windfall	H. C. Ruddick	E. S. Niblack
W. R. Tindall	F. Coulson	B. V. Chancee	Harmon L. Stanton	H. J. Pierce
W. W. Tindall	J. E. Keeling	E. B. Moser	O. C. Stephens	C. E. Ragan
	Flat Rock	Goldsmith	Urban Stork	A. E. Rhein
J. A. Davis	J. A. Davis	S. M. Cotton	Chas. C. Sutter	James V. Richart
Morristown	M. N. Daubenbeyer	Sharpsville	D. G. Tweedall	Floyd Riggs
Margaret L. Maisoll	Lafayette	H. B. Shoup	G. B. Underwood	Gerald Ruben
V. C. Patton	R. F. Annis	VANDERBURG COUNTY	Victor Varner	F. E. Sayers
Fountaintown	A. C. Arnett	Evansville	Robert W. Viehe	Edw. J. Schott
H. E. Nave	A. J. Bauer	R. R. Acre	John W. Visher	Etta B. Selsam
	R. H. Bayley	A. E. Allenbaugh	H. G. Weiss	V. A. Shanklin
			J. E. Welborn	Louis Siebenmorgen
			J. Y. Welborn	I. H. Sloss
			Thomas Wilkin	S. A. Smoots
			Charles F. Willis	James Spangler
			J. H. Willis	O. R. Spangler
			Ralph Wilson	W. E. Stewart
			S. W. Wishart	Daniel S. Strong
			W. P. Woods	John M. Sullivan
				F. A. Tabor
				G. J. Thomson

M. C. Topping	Charles F. Martin	Allen Stamper	Brookston	South Whitley
D. R. Ulmer	C. L. Luckett	W. R. Taylor	Charles J. Brockway	P. A. Garber
Arnold Utterback	Wendel C. Stover	R. G. Thayer	G. L. Derhamer	V. P. Huffman
C. R. Van Arsdall	Newburgh	Horace Wanninger	Wolcott	W. Ernest Wilkin
H. R. Vandivier	C. J. Munns	Arthur J. Whallon	W. A. Spencer	Churubusco
M. B. Van Cleave	Chas. M. Wilhelmus	Mary Wickens	WHITLEY COUNTY	J. H. Briggs
Frank L. Wedel		G. H. Wisener	Columbia City	E. A. Hershey
J. H. Weinstein		M. W. Yencer		
F. E. Weidemann		Centerville	Otto F. Lehberg	Larwill
Fred Wilson		W. M. Barton	E. V. Nolt	
Charles Wyeth	Salem	Oliver P. M. Ford	Benj. F. Pence	L. W. Tennant
Franklin Young	Donald Colglazier	Fountain City		
J. Rudolph Yung	Irvin Huckleberry			
E. T. Zaring	J. I. Mitchell	Leon T. Cox		
	Claude B. Paynter	O. N. Huff (H)		
	L. W. Paynter	Milton		
		Edgar C. Denny		
	Pekin	Hagerstown		
Eugene Schumaker	Wm. L. Green	William Miller		
Seelyville		Dublin		
C. S. Carmichael		Leslie Wilson		
New Goshen	WAYNE-UNION			
J. B. Loving	COUNTIES			
Prairie Creek	Cambridge City			
J. R. Wilson	Paul G. Hill			
	C. E. Kenyon			
	Liberty			
	Franklin T. Dubois			
WABASH COUNTY	James F. Lewis			
North Manchester	W. B. McWilliams			
Z. M. Beaman	W. A. Thompson			
O. G. Brubaker				
Joy F. Buckner				
L. Z. Bunker				
F. S. Kitson				
I. E. Perry				
G. W. Seward				
J. L. Warvel				
Wabash				
J. T. Biggerstaff	Richmond			
L. E. Jewett	Hubert E. Allen			
Minnetta Jordan	W. E. Ballinger			
G. M. LaSalle	Paul W. Blossom			
R. M. LaSalle	C. S. Bond			
R. A. Naugle	F. P. Buche			
Ed Pearson	J. C. Clawson			
Wm. Pearson	Randolph Compton			
Arthur P. Rhamy	Volney N. Fackler			
A. J. Steffen	V. C. Griffis			
J. W. G. Stewart	Harvey Hadley			
N. H. Thompson	F. E. Hagie			
F. M. Whisler	George R. Hays			
	R. L. Hiatt			
Roann	Curtis R. Hoffman			
James G. Kidd	E. E. Holland			
Lagro	C. J. Hufnagel			
M. E. Renner	Gayle J. Hunt			
LaFontaine	George B. Hunt			
J. L. Walker	Paul S. Johnson			
	E. F. Jones			
	F. E. Keith			
WARRICK COUNTY	Jos. H. Kinsey			
Boonville	F. W. Krueger			
Bowen Hoover	S. C. Markley			
J. G. Hoover	Elwood J. Meredith			
	W. L. Misener			
	C. L. Poston			
	H. P. Ross			
	L. F. Ross			
	Richard Schillinger			
		Monon		
		George R. Clayton		
		S. E. McClure		
		R. R. Richardson		
		Monticello		
		John C. Carney		
		M. H. Flinter		
		H. B. Gable		

DUES ARE PAYABLE NOW FOR 1937. PAY YOUR DUES BY JANUARY 1, 1937. GET YOUR RECEIPT EARLY. AVOID DELINQUENCY.

## NEW LOW RECORD IN DIPHTHERIA DEATHS

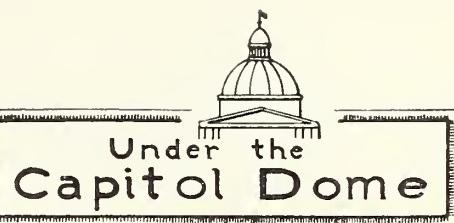
Twelve deaths from diphtheria for the month of October establishes a new low record. This brings the total for the year to eighty-three, which is only three more than the lowest previous record, namely, that of 1934. It now looks as if we had better than a fighting chance to make a new record for this year. For the past six months diphtheria deaths have been definitely below the average. If this should continue through November and December we would be considerably under the record of 1934.

The distribution of deaths for the month of October calls attention to Howard County with four deaths in the city of Kokomo. Knox County has two in the city of Bicknell and Lake County has two.

By age distribution there are eight under school age, three school children, and one adult.

Below is the tabulation by counties for the month and for the year:

County	No. for	No. for	Year
	for Month	October, 1936	
Allen	0	3	
Bartholomew	1	1	
Benton	0	1	
Brown	0	3	
Cass	0	1	
Clark	0	1	
Delaware	1	2	
Dubois	0	1	
Elkhart	0	2	
Grant	0	1	
Greene	0	2	
Howard	4	8	
Jennings	0	1	
Knox	2	3	
Lake	2	7	
Lawrence	0	3	
Madison	0	4	
Marion	1	12	
Martin	0	1	
Monroe	0	2	
Montgomery	0	4	
Owen	0	1	
Parke	0	2	
Pike	0	1	
Ripley	0	1	
St. Joseph	0	3	
Tippecanoe	0	4	
Vanderburgh	0	3	
Vigo	1	2	
Warren	0	1	
Washington	0	1	
Wayne	0	1	
	—	—	
	12	83	



Works Progress Administration employees have been at work on two sewer projects designed to improve public health conditions. At North Judson sewers were cleaned and a new outlet of the town's main sewer was laid. An extensive sewer project was started in Terre Haute. A line is being laid in Parke Street, from the Hulman Street system in Fourteenth Street to Twenty-fifth Street. The sewer ranges from twelve to twenty-four inches in diameter.

The annual meeting of the state board of registration and examination will be conducted in the board offices Tuesday, January 12, 1937. Program for the meeting has not been announced.

Offices of the state board of medical registration and examination have been moved from Room 5, Statehouse Annex, to Room 301, Statehouse. The board is sharing space previously occupied by the gross income tax department which has been moved to 141 South Meridian Street.

A clinical examination for six physicians applying for Indiana licenses under the reciprocal agreement with Illinois was conducted October thirtieth by the state board of medical registration and examination at the Indiana University Medical Center. Those who took the examination were John Theodore Kemp, Frank R. Sendra, Israel A. Fond, Joseph Kanter, A. E. Hubbard, and Stanley D. Swiontowski.

Dr. Verne K. Harvey, director of the state division of public health, has announced the appointment of Dr. John W. Ferree, of Bluffton, as chief of the new bureau of local health administration. In this post Dr. Ferree will supervise local health activities, helping organize local departments, aiding with preparation of programs and budgets. He began his services November twelfth and will give his first attention to organization work. Dr. Ferree, who is a native of Marion, received his A.B. Degree from the University of Pennsylvania in 1925, and graduated from the medical school of Indiana University in 1932. He served internships in the Harper Hospital in Detroit, the Passavant Memorial Hospital in Chicago, and the Evanston Hospital, Evanston, Illinois. He has been practicing at Bluffton since August, 1935.

## DEATHS

ROBERT W. HAWKINS, M. D., of Brazil, died October twenty-fifth, aged sixty-four years. Dr. Hawkins was a veteran of the Spanish American War and the World War. He graduated from the Medical College of Indiana, Indianapolis, in 1895.

HUGH MARTIN HALL, M. D., of New Carlisle, died in a Chicago hospital, October eighteenth. Dr. Hall was sixty-four years of age. He graduated from the University of Illinois College of Medicine, Chicago, in 1898, and was a member of the St. Joseph County Medical Society, the Indiana State Medical Association and a Fellow of the American Medical Association.

DEXTER A. BUCK, M. D., of Laporte, died November ninth, aged sixty-six years. Dr. Buck served as a captain in the Army Medical Corps during the World War. He graduated from the University of Michigan Medical School, Ann Arbor, in 1904.

ARTHUR B. CRAY, M. D., of Monticello, died November eighth in an Indianapolis hospital where he had gone for treatment. Dr. Cray was sixty-one years of age. He served over seas as a captain in the Medical Corps of the U. S. Army during the World War. He graduated from the Medical College of Indiana, Indianapolis, in 1903, and had practiced in Monticello since that time.

ROBERT G. THAYER, M.D., of Indianapolis, died suddenly at Richmond, Indiana, October thirtieth, while attending a political meeting. Dr. Thayer was thirty-five years old. He graduated from the Indiana University School of Medicine, Bloomington and Indianapolis, in 1930, and had worked as a staff psychiatrist at the Central Indiana Hospital for the Insane in Indianapolis and at the Richmond State Hospital in Richmond. Dr. Thayer was a member of the Wayne-Union County Medical Society, the Indiana State Medical Association, and a Fellow of the American Medical Association.

JOHN T. WRAY, M.D., of New Albany, died October thirtieth, aged sixty-five years. Dr. Wray was not in active practice, but he was a member in good standing of the Floyd County Medical Society, the Indiana State Medical Association, and the American Medical Association. Dr. Wray graduated from the University of Louisville School of Medicine in 1898.



## HOOSIER NOTES

Dr. and Mrs. A. G. Moore of Deer Creek have returned to their home after a visit in Dallas, Texas, where Dr. Moore addressed the Dallas County Medical Society.

Dr. John W. Ferree of Bluffton has been named chief of the new Bureau of Local Health Administration of the Indiana Division of Public Health. Dr. Ferree will supervise local health activities, help organized local departments and aid with preparation of programs and budgets.

The Indiana Pediatric Society held its annual fall meeting in Fort Wayne, November sixth and seventh. New officers elected were Dr. Ernest R. Carlo, Fort Wayne, president; Dr. H. D. Lynch, Evansville, vice-president, and Dr. Matthew Winters, Indianapolis, re-elected secretary-treasurer.

Applications for space in the scientific exhibit for the 88th annual session of the American Medical Association, to be held in Atlantic City, N. J., June 7-11, 1937, must be submitted before February 1, 1937. Applications may be sent either to one of the section representatives or to the Director, Scientific Exhibit, American Medical Association, 535 North Dearborn Street, Chicago, Ill.

Dr. and Mrs. R. H. Rhumkorff have moved from Portsmouth, Ohio, to Goodland, Indiana, where Dr. Rhumkorff will take over the practice of the late Dr. Frank Kennedy.

Dr. William H. Conner, who has practiced in Fort Wayne for twenty-two years, has retired from active practice. Dr. and Mrs. Conner have been prominent in professional, social and civic affairs of the Negro group in Fort Wayne.

Dr. Lawrence Kelsey of Kewanna has given a contract for the building of a seventeen room hospital and office building in Kewanna. Plans for the building include air-conditioning.

Dr. Phillip Corboy of Valparaiso sailed October thirtieth from New York for Europe where he will do postgraduate work in various European cities until the latter part of December.

Miss Jo Gerber of Jasper and Dr. Paul J. Blessinger of Jasper were married October twenty-seventh.

Dr. Paul Merrell is associated in practice with Dr. E. V. Hahn of Indianapolis.

Miss Kathryn Waldron of Mattapoisett, Massachusetts, and Dr. Max Garber of Warsaw were married at the home of the bride, October twenty-fourth.

Members of the Indiana Association of Medical Record Librarians held their third annual conference in Indianapolis, November seventh. Speakers included Dr. J. H. Clevenger, of Muncie, Dr. E. F. Kiser of Indianapolis, Miss Adeline Kennedy of Chicago, and Miss Grace Bartle of Indianapolis who is the president of the Association.

Creditors of the late Dr. James H. Ashabanner, of New Albany, were freed from any obligation to his estate by his will which specifically provided that all debts owing him at the time of his death be cancelled, and that his executor should not attempt to collect them.

The Mooresville Sanitarium, owned by Drs. J. E. Comer and Kenneth Comer, was badly damaged by fire October fifth. The sanitarium equipment and Dr. J. E. Comer's office have been moved to his home in Mooresville; Dr. K. E. Comer has moved his office to the Dr. C. L. Aker building.

The American Association for the Study of Goiter again is offering the Van Meter prize award of \$300 and two honorable mentions for the best essays submitted concerning experimental and clinical investigations relative to the thyroid gland. Competing manuscripts must reach the corresponding secretary, Dr. W. Blair Mosser, 133 Biddle Street, Kane, Pennsylvania, not later than April 1, 1937. Information concerning the competition may be obtained from Dr. Blair.

At the convocation of the American College of Surgeons in Philadelphia, October twenty-third, fellowships were conferred upon the following Indiana surgeons: Paul Beard, Indianapolis; M. E. Beverland, Indianapolis; John H. Bowles, Muncie; Emor L. Cartwright, Fort Wayne; Truman E. Taylor, Bluffton; Joseph H. Clevenger, Muncie; John C. Fleming, Elkhart; Jack E. Pilcher, Indianapolis; Frank B. Ramsey, Indianapolis; Edward T. Stahl, Lafayette; and M. C. Topping, Terre Haute. Officers of the American College of Surgeons were elected as follows: president, Eugene H. Pool, New York; first vice-president, Emile Holman, San Francisco; second vice-president, George E. Wilson, Toronto; chairman of the Board of Regents, George Crile, Cleveland.

#### AUXILIARIES

Medical society auxiliaries are exhibiting more than usual enthusiasm in their fall meetings.

Mrs. Louis D. Belden, newly elected president of the Marion County auxiliary, presided at the first meeting of the season, November sixth, at the Hotel Antlers in Indianapolis. Other new officers are Mrs. W. P. Morton, president-elect for 1937; Mrs. Chester A. Stayton, first vice-president; Mrs. Clark Rogers, second vice-president; Mrs. Lester A. Smith, third vice-president; Mrs. George Gareau, corresponding secretary; Mrs. G. W. Gustafson, recording secretary; Mrs. H. A. VanOsdol, treasurer; Mrs. Bert E. Ellis, publicity chairman; Mrs. John T. Wheeler, parliamentarian, and Mrs. Frank Gastineau, bulletin chairman. The program for the November meeting, arranged by Mrs. Edgar F. Kiser, included a lecture on "Shuttlecraft Around the World," by Mrs. Guy H. Shadinger.

Members of the Woman's Auxiliary to the Vigo County Medical Society entertained with a benefit bridge party, November third, at the home of Mrs. Rudolph Duenweg in Terre Haute.

The Delaware-Blackford County Auxiliary met September fifteenth, in Muncie. "Vacation Echoes" was the theme of the meeting, with various members taking part.

At a dinner meeting of the Madison County Auxiliary in Anderson, October nineteenth, committees were appointed as follows: Program, Mrs. H. W. Gante, Mrs. C. V. Rozelle and Mrs. R. O. Zierer; international relations, Mrs. E. E. Hunt, of Pendleton; press and publicity, Mrs. M. A. Austin; flowers, Mrs. E. M. Conrad.

In addition to the articles already enumerated, the following have been accepted by the Council on Pharmacy and Chemistry of the American Medical Association:

Abbott Laboratories

Sodium Phenobarbital 1½ grain tablets

Ampules Phenobarbital Sodium, 2 grains

Calco Chemical Co., Inc.

Tetrachlorethylene-Calco

Tetrachlorethylene-Calco, 1 cc.

Hixon Laboratories, Inc.

Diphtheria Toxoid-Alum Precipitated (Refined)

International Vitamin Corporation

I.V.C. Halibut Liver Oil Plain

Eli Lilly & Co.

Parathyroid Extract-Lilly, 1 cc. ampule

McNeil Laboratories, Inc.

McNeil's Emulsion of Castor Oil

Ohio Chemical & Manufacturing Co.

Ohio Carbon Tetrachloride Compound

Sharp & Dohme, Inc.

Wax Ampoules Silver Nitrate Solution, 1 per cent

Diphtheria Antitoxin, Bovine-Mulford

E. R. Squibb & Sons

Thromboplastin Local-Squibb, Dental Package, six 4 cc. vials

Wallace & Tiernan Products, Inc.

Azochloramid Solution in Triacetin 1:125

## SOCIETIES — INSTITUTIONS

### INDIANA STATE MEDICAL ASSOCIATION THE BUREAU OF PUBLICITY

August 21, 1936.

Present: William N. Wishard, M.D., chairman; F. M. Gastineau, M.D.; T. A. Hendricks, executive secretary, and Gordon Batman, M.D., chairman of the Public Relations Committee of the Indianapolis Medical Society, and Howard Mettel, M.D., chief of the Bureau of Maternal and Child Health of the Indiana State Board of Health, upon invitation of the Bureau.

The release, "State Fair Health Exhibit," approved for publication in Monday papers, August 31.

The Bureau reviewed the letter from the chief of the Bureau of Maternal and Child Health of the Indiana State Board of Health regarding speakers for maternal and child health programs and made the following suggestions:

1. The Bureau will not assume the responsibility of endorsing a list of speakers and subjects for any other agency.

2. The Bureau suggests that speakers making talks on maternal and child health programs speak on subjects very directly and logically connected with maternal and child health.

3. As a basis for cooperation with the State Board of Health it is suggested that the Bureau of Publicity adopt the policy for the time being of referring any requests for speakers on subjects definitely connected with maternal and child health to the state bureau. It would seem to be a proper policy for the Bureau of Maternal and Child Health to refer to the Bureau of Publicity requests for speakers on subjects which are not specifically related to the maternal and child health campaign.

In answer to these suggestions the chief of the Bureau of Maternal and Child Health stated that the list had been gone over and all subjects not directly connected with maternal and child health had been eliminated. He stated also that the two bureaus should work together and not duplicate services. The chief of the Bureau of Maternal and Child Health said further that he felt that subjects such as eye conditions, throat conditions, or surgical conditions of the chest or abdomen of the child are a definite part of any pediatric program.

The Bureau took final action in regard to the pamphlets sponsored by the Indianapolis Medical Society and the proposal of the chairman of the State Association Committee for the Study of Puerperal Mortality that these pamphlets be distributed by the State Association. The Bureau felt that this would not be wise.

The August bulletin of the Indiana Tuberculosis Association which used in its editorial columns the release of the Bureau entitled, "That 'Ole Swimmin' Hole," was brought to the attention of the Bureau.

A paper from one of the Indiana cities in which appeared frequent notices of patients who had received treatment at a local, private hospital was brought to the attention of the Bureau. The Bureau instructed the secretary to forward this paper to the secretary of the county society in whose jurisdiction the hospital in question is located. A letter was to accompany the paper in question, stating that these notices violated the rules of the State Association, which rules had been approved again and again by the House of Delegates. The letter also was to contain the suggestion that a special meeting of the local society be called at which a resolution should be passed stating that the profession did not desire the newspapers to carry notices in which the names of physicians, private hospitals, or the patient's condition were mentioned.

The Bureau received a request from the State Fair Committee asking that 5,000 pamphlets entitled, "Information Regarding the Prevention of Contagious Diseases," be printed. The Bureau

approved this request but thought it would be well to submit these pamphlets to several pediatricians for a check-up. This is a reprinting of the same pamphlet distributed last year.

September 16, 1936.

Present: William N. Wishard, M.D., chairman; F. M. Gastineau, M.D.; E. Vernon Hahn, M.D., and T. A. Hendricks, executive secretary.

Schedule of releases on the eighty-seventh annual session of the Indiana State Medical Association to be held at South Bend October 6, 7 and 8 was approved.

Card received from the member of the state Pioneer Memorial Committee who resides at Sullivan inviting the Pioneer Memorial Committee to come to Sullivan to pay a visit to the grave of Jane Todd Crawford upon whom Doctor Ephriam McDowell performed his famous operation.

Notice received from the Committee on Postgraduate Instruction of The Medical Society of Milwaukee County in regard to a special postgraduate course in syphilis. This was brought to the attention of the Bureau as a typical course which is being arranged by various state organizations.

Article that appeared in the *Readers Digest* entitled "Why Don't We Stamp Out Syphilis?" written by the Surgeon General of the United States Public Health Service brought to the attention of the committee.

Suggestions for lay and county medical society programs prepared by the director of the Maternal and Child Welfare Division of the State Board of Health brought to the attention of the Bureau. These were turned over to one member of the Bureau for review.

September 24, 1936.

Present: William N. Wishard, M.D., chairman; F. M. Gastineau, M.D., and T. A. Hendricks, executive secretary.

Speakers were assigned to give radio talks of eight minutes each over the South Bend radio station during the state meeting in accord with the request received from the radio station. The subjects covered in these talks follow:

Public Health and the Public.

Pneumonia.

Prevention of Contagious Diseases.

One of these talks will be given by the head of the education department of the State Division of Public Health and the other two will be delivered by out-of-state guest speakers.

The following report upon the classified list of subjects for health lectures sponsored by the Bureau of Maternal and Child Health of the Indiana State Division of Public Health was made to the Bureau by one member of the Bureau:

"These suggestions consist of a comprehensive list of speakers from every county in the state. The subjects chosen deal with maternal and child health.

"There is also an outline of available obstetric motion picture film produced by Dr. J. B. DeLee, of Chicago. The time allowed for each reel is 15 minutes. The films vary in length from one to four reels and subject matter seems suitable only for medical audiences.

"A number of other motion pictures available for lay audiences and, some of which have suitable titles which suggest that they are particularly valuable for an audience of children.

"Considerable health literature for free distribution is available in pamphlet form. The subjects pertain to maternal, infant, and child health; dental hygiene and communicable diseases. Some are publications of the American Medical Association. Another group of pamphlets pertain to social hygiene and sex problems.

"A classified list of subjects for health lectures sponsored by Speakers' Program of Bureau of Maternal and Child Health can be had. These subjects consist of conduct and behavior problems, nutrition and growth, infant feeding and diet, communicable diseases, respiratory infections, surgery, hygiene, skin disease, allergic conditions, eyes, heart, maternal care; ear, nose and throat, and other general topics.

"There is also a list of health literature for free distribution, such as maternal, infant, and child health, and dental hygiene."

October 23, 1936.

Meeting called to order at 3:30 p. m.

Present: William N. Wishard, M.D., chairman; F. M. Gasmineau, M.D., and T. A. Hendricks, executive secretary.

Release, "Hoosierland's Health Harvest," approved for publication on Wednesday, October 28. This is the same release prepared by the Bureau several years ago and it is reprinted upon the request of several editors.

Request for speaker:

January 13, 1937—Parent-Teacher Association, School No. 76, Indianapolis. Request made for someone to talk upon an orthopedic subject in reference to children.

Request received from a member of the Committee on Medical Trends of the New York State Medical Society to be placed upon the mailing list to receive articles prepared by the Bureau. Secretary instructed by members of the Bureau to comply with this request.

Material received by the Bureau in regard to the venereal disease campaign that is being furthered by the U. S. Public Health Service. This material was turned over to one member of the Bureau for review and report at the next meeting of the Bureau.

Letter received from a life insurance company telling of a nation-wide campaign against pneumonia. The Bureau assigned this material to one member for study and a report at a future meeting.

Letter received from the secretary of a county society in the northern part of the state enclosing a card that was carried in the newspaper by a physician of that county and asking the Bureau whether or not such a card is unethical. The Bureau referred the secretary to the Principles of Medical Ethics of the American Medical Association to which the Indiana State Medical Association adheres. In short, the printing of such cards is not per se unethical, but if it is not the custom of physicians in the community to publish or circulate personal business cards, then a physician who does print such cards and who disregards local customs is guilty of bad taste and of offending the recognized ideals of the profession of his community. If the physician in question is a prospective member of the society he should be informed if he is violating any custom of the profession of the community.

A clipping in regard to a "100 per cent Perfect Baby Health contest" brought to the attention of the Bureau. The newspaper article stated, "The children are all being examined at the \_\_\_\_\_ hospital under the supervision of Dr. \_\_\_\_\_, with the assistance of a group of graduate nurses," and the statement was made that the examinations were made "under rules and regulations of the American Medical Association, and there is no charge or obligation to parents." The Bureau instructed the secretary to send this clipping to the secretary of the local county medical society asking him whether this was a private or a public enterprise, and to get further information in regard to this matter.

November 6, 1936.

Present: William N. Wishard, M.D., chairman; F. M. Gasmineau, M.D., and T. A. Hendricks, executive secretary.

The release, "Hints to Hoosier Hunters," approved for publication on Thursday, November 12.

Request for speaker:

November 18—Parke-Vermillion Medical Society, Clinton, Ind. Request made for someone to talk on a gastrointestinal subject.

The Bureau was informed in regard to the proposed special historical number of THE JOURNAL. The chairman of the Bureau was asked to prepare a sketch on the history of the Indiana State Medical Association and also upon the history of hospitalization in Indiana. The chairman of the Bureau suggested that whoever is to write the history of medical journalism in Indiana would find most interesting material in an issue of the old *Indiana Medical Journal* of January or February, 1887, in which was printed a response to a toast by Doctor Frank C. Ferguson, then editor of the *Journal*. The suggestion also was made that an article be prepared on the history of medical legislation.

Letter received from a member of the Committee on Medical Trends of the New York State Medical Society thanking the Bureau of Publicity for placing his name on the mailing list to receive articles released by the Bureau.

The Bureau decided that hereafter the meeting should be held the first of the week rather than the last of the week, Tuesday being set as the most convenient day for the majority of the members of the Bureau.

Letter received from the secretary of a medical society in the southern part of the state in regard to a baby contest that received a great deal of newspaper publicity. This letter was received as a result of a request for information concerning the sponsorship of this contest from the local medical society secretary. The Bureau instructed the secretary to acknowledge the letter, stating that such contests are not approved unless they are conducted under the auspices of the local county medical society. It is the opinion of the Bureau that such contests should not be approved when conducted by private individuals.

Articles upon medical subjects which had appeared in the *Indiana Parent-Teacher* bulletin and in *Food Facts*, a publication sponsored by the Wheat Flour Institute of America, brought to the attention of the Bureau. These articles were prepared by the Professor of Bacteriology and Public Health of the Indiana University School of Medicine and were approved by the Bureau.**THE EXECUTIVE COMMITTEE**

October 5, 1936.

Roll call showed the following present: C. A. Nafe, M.D., chairman; R. L. Sensenich, M.D.; E. D. Clark, M.D.; O. O. Alexander, M.D.; E. M. Shanklin, M.D.; A. F. Weyerbacher, M.D., and T. A. Hendricks, executive secretary.

Minutes of the meeting of August 16, 1936, approved on motion by Dr. Clark, seconded by Dr. Alexander.

The monthly statements of receipts and expenditures and reports of the budget for the Association committees and THE JOURNAL for August and September were presented.

**Membership Report**

Number of members September 30, 1936 .....	2797
Number of members September 30, 1935 .....	2737
Gain over last year .....	60

Number of members December 31, 1935 .....

2808

**Treasurer's Office**

Notice received that trading has started again in certain Chicago bonds held by the Association.

**Legislative, Legal and Social Security Matters**

(1) Letter received from Dr. William R. Davidson, secretary of the State Board of Medical Registration and Examination, in regard to cultists removing tonsils and hemorrhoids. This letter was referred to the Council of the Indiana State Medical Association.

(2) Letter received from Albert Stump stating that an employer has the right to select a physician for his injured employees under the Indiana state compensation law.

(3) Resolution passed by the Medical Library Association asking Congress to appropriate funds so that material in the Army Medical Library and its *Index-Catalogue* might be made more available to the medical libraries throughout the country brought to the attention of the Committee. The chairman of the Executive Committee was to call this matter to the attention of the House of Delegates and refer it to the House for action.

(4) Letter from W. U. Kennedy, M.D., of Newcastle, president of the Welfare Board of Henry County, brought to the attention of the Committee.

(5) Resolution proposed by M. F. Daubenheyer, M.D., a member of the Committee on Veterans' Affairs of the Indiana State Medical Association, brought to the attention of the Executive Committee. The Committee was of the opinion that this matter should be referred to the Committee on Veterans' Affairs as a whole before being brought up for action in the House of Delegates.

(6) Proposed formation of League for Defense of American Medicine. The Committee was of the opinion that the

Indiana profession should keep itself informed in regard to the league but it should study the matter further before taking any active part in having anything to do with the formation of such an organization.

#### Annual Secretaries' Conference

The Executive Committee feels that due to the increased interest in this conference and due to its size and prominence, in the future proposed programs should be taken up with the Committee before speakers are invited. The secretary was instructed to write a letter to Dr. A. M. Mitchell, chairman of the conference, congratulating him upon the growth of the conference and informing him of the interest of the Executive Committee in future conferences.

#### Socialization of Medicine

Report received upon the situation at Economy in regard to medical service. According to the information, 62 families are enlisted in the mutual health movement in that community. It is understood that under the original plans 200 families were expected to sign up for the service.

#### Hospital Insurance

(1) Information in regard to the Cleveland Hospital Council promoting hospital insurance sent to the Committee by Dr. John R. Brayton, of Indianapolis. The Committee instructed the secretary to forward this information to the secretary of the Marion County Medical Society.

(2) Correspondence and promotional material of the hospital insurance plan proposed by L. B. McCracken, manager of the Indianapolis Medical and Dental Business Bureau, brought to the attention of the Executive Committee. The Executive Committee was pleased to hear that the Indianapolis Medical and Dental Business Bureau was not connected at all with this proposal and that Mr. McCracken had withdrawn his support from this venture. Dr. Nafe, chairman of the Committee, was authorized to make a statement before the House of Delegates that despite reports that had appeared in the press of the state, the Indiana State Medical Association had nothing to do with this proposed insurance scheme.

#### Medical Economics

(1) Overcharging of physicians for the use of telephones. Letter received from Dr. W. W. Swarts, of Auburn, Indiana, in regard to this matter brought to the attention of the Committee. The Committee instructed the executive secretary to address a letter to the Public Service Commission, asking the Commission to give its opinion in regard to this matter.

(2) Letter received from Dr. Charles E. Miller, of Muncie, in regard to protecting individual physicians of the state who have invested in realty companies which are now in hands of receivers brought to the attention of the Committee. The Committee was under the impression that this was an individual matter to be handled by individual physicians and that this was not in the province of the Indiana State Medical Association.

(3) Louis E. Evans, successor to Clyde R. White in Social Research Department of Indiana University. Information in regard to Mr. Evans' viewpoint concerning socialized medicine brought to the attention of the Committee.

#### The Journal

(1) *Increase in advertising rates.* The Executive Committee approved the increased advertising rates as listed in the schedule worked out by the Cooperative Advertising Bureau of the American Medical Association which was sent to members of the Executive Committee previous to the meeting. The new rates will take effect January 1, 1937, and all new contracts will be accepted only at the new rates; old advertisers will be privileged to renew their old contracts for one year at the old rates if renewals are made prior to January 1, 1937.

(2) Correspondence in regard to the Washington Institute of Medicine, an organization which sells physicians a professional research service, brought to the attention of the Committee. Word received from the American Medical Association that they would approve advertising from this organization for the JOURNAL. This approval came after an interview with the representative of that company who called on the officials at the A.M.A.

November 1, 1936.

Meeting called to order at 11:30 a. m.

Roll call showed the following present: C. A. Nafe, M.D., chairman; H. H. Wheeler, M.D.; R. L. Sensenich, M.D.; E. D. Clark, M.D.; H. M. Baker, M.D.; O. O. Alexander, M.D.; E. M. Shanklin, M.D., and T. A. Hendricks, executive secretary.

The monthly statement of receipts and expenditures and report of the budget for the Association committees and THE JOURNAL for October were presented.

#### Membership Report

Number of members October 31, 1936	2,812
Number of members October 31, 1935	2,760
Gain over last year	53

Number of Members December 31, 1935	2,808
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#### Treasurer's Office

(1) The Executive Committee was notified that the report of the Auditing Committee was approved by the House of Delegates.

(2) Report made that two Lake County state highway aid bonds of \$1,000 each mature January 1, 1937. Upon the motion of Dr. Wheeler, seconded by Dr. Alexander, the Committee recommended that when this money is reinvested it be invested in government securities.

#### 1937 Session at French Lick Springs Hotel

(1) Members of the Committee received copies of the outline of the preliminary report that is to be made to the Council at its midwinter meeting, January 17, by the Orange County Medical Society in regard to convention arrangements.

(2) The Executive Committee made a preliminary review of arrangements with the hotel management.

#### Graduate Education

(1) The correspondence in regard to the graduate education meeting to be held next spring brought to the attention of the Committee. After a thorough discussion of this matter the Committee again authorized Dr. Clark to appoint his committee as soon as convenient and to get under way with preliminary arrangements for the meeting. The Committee felt that not only should out-of-state speakers appear upon the program but that Indiana also should be well represented on the program.

(2) Letter received from Henry Davis, manager of the Indianapolis Convention Bureau, regarding the dates that might be available in Indianapolis in case it is decided to hold the graduate education meeting in April or May.

#### Secretaries' Conference

Dr. A. M. Mitchell, chairman of the conference, suggested speakers for the annual conference, the date for which was set for Sunday, January 31.

Membership problems was one of the subjects which was suggested for discussion by the county medical society secretaries.

#### Legislative, Legal and Social Security Matters

(1) *Annual registration of physicians.* This subject was discussed at length by Dr. W. R. Davidson, Evansville, secretary of the State Board of Medical Registration and Examination. It was felt that this was not the time to promote legislation asking for annual registration of physicians.

(2) Dr. Davidson discussed many other matters which come up for consideration before the State Board of Medical Registration and Examination, among these being discipline of physicians who violate the narcotic act, and rewriting the present medical practice act. Dr. Davidson spoke of the fact that the State Board would like to make a test case in regard to cultists removing tonsils and giving treatment by diathermy. He said he felt that if a case were brought to the courts such treatment by cultists would be declared illegal.

(3) Letters and correspondence in regard to advertising by quacks brought to the attention of the Committee.

(4) Suggestion was made by the secretary that it might be advisable to prepare a legislative handbook to be presented to the legislative committeemen in the various counties and to send to the members of the legislature. The members of the Committee suggested that the secretary prepare a dummy of such a handbook for the next meeting of the Committee.

**Socialization of Medicine**

Dr. H. W. Shaw, of Henryville, appeared before the Committee and outlined his plan for taking care of those families which are under the care of the National Resettlement Administration. Dr. Shaw said that under the old FERA he was able to obtain pay for services to the indigent sick but at the present time the township trustee refuses to pay for services rendered families on WPA work. The Committee explained that it was obligatory for the township trustee to see that those WPA workers who are ill receive proper medical attention and that the physicians rendering such medical attention should be paid by the township trustee. The Committee members stated that an opinion of the attorney-general made it obligatory for the township trustee to take care of these cases.

**Group Hospitalization**

Bulletins from the California State Medical Association and the American Hospital Association advocating group hospitalization brought to the attention of the Committee.

**Medical Economics**

Correspondence in regard to overcharging physicians on telephone rates brought to the attention of the Committee.

**Committee Appointments for 1937**

(1) The Executive Committee approved a suggestion that the statistician of the Association prepare a survey showing the number of physicians in the various county societies that have served on State Association committees during the past ten years. This action was taken upon the motion of Dr. Alexander, seconded by Dr. Senenich.

**The Journal**

(1) Upon the motion of Dr. Alexander, seconded by Dr. Wheeler, the Committee approved the purchase of an electro-type filing cabinet.

(2) Letter received from L. H. South, M.D., director of the Bureau of Bacteriology of the State Department of Health of Kentucky, which reads as follows:

"I have recently had an exhibit of all state journals at the annual meeting of the Kentucky State Medical Association at Paducah, and I am very happy to tell you that your journal was the most admired of any of the others. Its general makeup and its illustrations and the program, attracted special attention."

(3) Request received from Merck and Company to reprint part of an original article approved by the Committee.

(4) Upon the motion of Dr. Wheeler, seconded by Dr. Senenich, approval was given to exchange with the Proceedings of the Royal Society of Medicine of England.

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### WOMAN'S AUXILIARY REPORT OF THE NATIONAL MEETING\*

No report of an annual national meeting can give any idea of the inspiration gained from attending one. Friendliness and sociability were the key words of this convention at Kansas City last May.

Eleven hundred and eighty delegates registered, which is the largest number in the history of the organization. These delegates were welcomed by the three hundred local hostesses assisted by members of auxiliaries from Missouri and Kansas.

On Monday evening the delegates were entertained at dinner at the beautiful Kansas City Country Club. Later, a program of music and dancing was given by Kansas City talent after which we enjoyed a social time greeting old friends and making new ones.

On Tuesday morning the Southern Breakfast was held at eight o'clock at Hotel Baltimore, headquarters for the convention, and at nine o'clock the first general session of the meeting convened, when Mrs. Herbert L. Mantz, of Kansas City, general chairman on arrangements, was introduced by Mrs. Rogers N. Herbert, the national president. Mrs. Mantz, a most charming woman, gave us a cordial welcome to the city. The Reverend Robert I. Wilson, pastor of the First Baptist Church of Kansas City, offered the invocation. The address of welcome was given by Mrs. A. W. McAlester, also of Kansas

City, and the response by Mrs. James Blake, of Minnesota, a former national president.

The very beautiful "In Memoriam" service followed, honoring the memory of those who had passed away since the last national meeting. Then came the reading of the minutes of the last annual convention and the roll call by the secretary and the general business of the convention, after which we heard Mrs. Herbert's message to the Auxiliary, which was beautiful in thought and inspiration.

Mrs. Robert E. Fitzgerald, president-elect, was the next speaker. Very briefly she expressed her appreciation of the honor shown her in having been chosen to follow Mrs. Herbert as national president.

Next came the reports of all national officers and chairmen of standing committees. This took up the entire morning, after which a luncheon honoring past national presidents was given in the Renaissance Room at the Hotel Baltimore. Dr. W. W. Bauer, director of Health and Public Instruction of the A. M. A., was the speaker. His talk was followed by a round table discussion by national officers.

From 3:30 to 5:30 o'clock convention visitors were taken for drives over the city, and tea was served in many of the homes of local Auxiliary members and at the hospitals in observance of National Hospital Day.

In the evening we all went to the opening meeting of the A. M. A., held in the beautiful new Municipal Auditorium with a seating capacity of 25,000. There we heard some good speakers of the A. M. A., also the governor of Missouri, the Hon. Guy B. Parks, and the governor of Kansas, the Hon. Alfred M. Landon; the latter directed a few remarks to the Woman's Auxiliary.

Wednesday morning was given to hearing the reports of state presidents. Thirty-one responded. I shall not go into detail regarding these reports from the states, for they are all working for the same end—endeavoring to carry out the ideals of the National Auxiliary. Some, however, have attempted and accomplished remarkable results.

One of the outstanding achievements of the year was the organizing of the state of New York in March, under the leadership of Mrs. John L. Bauer. There are sixty-two medical societies in the state and Mrs. Bauer sent out fifty-seven letters to Medical Society presidents asking for permission to cooperate with the Medical Societies to organize a Woman's Auxiliary to each County Society. Five counties were organized with a membership of six hundred which marked the beginning of the history of New York State, in Auxiliary aims and purposes.

Many states reported much activity in legislative matters. One outstanding report being that given of the work of Mrs. Augustus S. Kech, state legislative chairman of the Pennsylvania Woman's Auxiliary. She attended all sessions of the state legislature; was present at the capitol three days of each week for twenty-five weeks in the interests of the Pennsylvania Medical Association and through her earnest efforts, three objectionable bills were defeated. The Optometrists' Bill—Granting right to practice all medical and surgical treatment of eyes, except surgery for cataract. The Chiropractor Bill—Granting right to practice all treatment, medical and surgical, for feet. The Chiropractic Bill—Requiring all practitioners of any and all healing arts, including M.D.'s, treating or working on spine to have license. Many other bills for irregulars and cults were likewise defeated.

The State of Pennsylvania takes pride in having the largest Auxiliary. It has forty-nine counties organized with a membership of more than twenty-four hundred. Its president reported that each Auxiliary in the state is doing something worth while in some special work. During the year, every county contributed to the Medical Benevolent Fund, the total amounting to more than three thousand dollars.

Many states reported celebrating "Doctor's Day." Georgia has chosen March 30th, the day that famous Georgian, Dr. Crawford W. Long, the first to use ether anesthesia in surgery. Louisiana and North Carolina have chosen the same day and the interest in "Doctor's Day" is spreading to other states who wish to honor the men who have dedicated their services to the welfare of humanity.

\* Presented at the meeting of the Woman's Auxiliary in South Bend, October 7, 1936.

Texas reported a paid-up membership of more than fourteen hundred. They have extensive public relations activities, providing programs for twenty-two clubs through which they have brought about very friendly contacts with laymen and lay organizations. Texas also does much philanthropic work. Last year the San Antonio Auxiliary raised two thousand dollars for the Children's Shelter Fund. In Houston, the annual benefit party for the Tuberculosis Children's Milk Fund has provided from four hundred to eight hundred for this purpose each year for the past six years.

Michigan has fourteen counties organized with a membership of more than six hundred. They meet every two weeks and have a year book full of interesting programs. Michigan carried off the honors in getting the largest number of subscriptions to *Hygeia* during the year, turning in eighteen hundred subscriptions.

In regard to *Hygeia*, some pioneering work was done in the West by a charitable minded woman, a trained health worker, who translated *Hygeia* articles into Spanish, thus to instruct the Mexican women prisoners in the penitentiaries, as to sanitation, the rearing of children, etc., for it is the custom there for the sentenced woman to take her brood to prison with her.

The report from Utah was most interesting. They have nine units working to further National Auxiliary ideals. In many districts members travel from fifty to one hundred and twenty miles to attend meetings. When Brigham Young said, "This is the place," he apparently failed to consider the difficulties Medical Auxiliary members would one day encounter in traveling wide spaces, climbing over mountains and lowering themselves into carefully tucked-away valleys. *Hygeia* has been introduced into hundreds of families who have been convinced of its helpfulness. Broadcasts sponsored by the A. M. A. have been widely advertised and, according to the doctors, advice given in the broadcasts, has not only been appreciated but has been put to use. Auxiliary members are working through club and social affiliations quietly but effectively to enlighten the public concerning the danger and disadvantages of state medicine.

Utah is very much in need of quack elimination and a concerted effort is being made by the Auxiliary to rid the state of its dangers. Charities throughout the state are feeling the support of the "Doctor's Wives" in the interest shown in children's eyes, in the inadequate hospital equipment, early hospital care, contributions to rural schools and libraries of valuable reading material. Friendliness in the profession has decidedly improved in Utah through Auxiliary activities. A need of each other and a combined interest in the work is very apparent.

Idaho reported three organized counties with thirty-nine members. They meet once a month and some of the members have to travel sixty miles to attend the meetings. They have an educational program and have interesting reports from county and school nurses. Copies of *Hygeia* have been placed in schools and public libraries.

Oregon reported eleven organized counties with a membership of 270. Usually the meetings are held in the homes of members, for luncheon, tea or supper which has done much to encourage sociability in the profession. Each Auxiliary give a public relations tea during the year to which officers and members of other organizations are invited. They distribute *Hygeia* generously and their quota for the year was reached. They have had many radio programs and a large philanthropic program which is carried out in each location according to its needs. They also have a speaker's bureau.

Missouri has twenty-one counties organized with a membership of nine hundred and eighty-eight.

Kansas has ten counties organized with two hundred and forty members.

California reported seventeen counties organized. They specialize in public relations and health education. Their philanthropy includes a Student Loan Fund, Christmas baskets to needy families of physicians, to hospitals and charitable institutions.

Colorado reported eight organized counties with three hundred and fourteen members. Their Physicians' Benevolent

Fund with a balance at the beginning of their third year of six hundred dollars is proving profitable and popular. A year book is published after each annual meeting. Colorado was very active during the legislature, in preventing many unsafe health measures from being enacted in spite of vigorous opposition from irregulars and cults. The editor of Colorado *Journal* urges a vigorous program in health education. He says the law-makers, the Congressmen must know what is right, and they must know the people they represent expect intelligent activity on their behalf. Many a legislator will admit that a word from the doctor at home—who may have brought his babies into the world means more to him than all the lingo of highly paid lobbyists. The County Auxiliaries are all actively engaged in various worth-while undertakings, all of which brings the members closer together in bonds of friendly understanding.

Almost without exception the states reported placing *Hygeia* in schools and public libraries, and many reported the issuing of a year book immediately after the annual meeting.

Following the reports of the state presidents came the election of officers. Mrs. Augustus S. Kech, of Altoona, Pennsylvania, was named president-elect. The installation of officers followed with the presentation of the very beautiful president's pin.

At one o'clock was the guest luncheon in the Pompeian Room at which some eleven hundred attended. Dr. James S. McLester, president of the A. M. A., gave greetings. Dr. Morris Fishbein spoke briefly. Dr. Perry Bromberg, of Nashville, Tennessee, was the guest speaker.

From three-thirty to five-thirty visitors were again taken on drives about the city and tea was served in homes of Auxiliary members.

On Wednesday evening delegates were guests at the beautiful Gallery of Art, presented to the city by William Rockhill Nelson, Kansas City Auxiliary women acting as hostesses.

Thursday was given to post-convention meetings, committees, etc. There was luncheon at the Woman's City Club and in the evening the president's reception and ball.

Friday was play day, being given to golf and tours and with that, the fourteenth annual convention of the Woman's Auxiliary to the American Medical Association came to an end.

Respectfully submitted,

HENRIETTA L. CLARK,  
(Mrs. Edmund D. Clark),  
Delegate.

#### WAYNE COUNTY MEDICAL SOCIETY

John Milton Fouts

*In Memoriam*.—In the death of Dr. John M. Fouts, the Wayne County Medical Society has lost an interested and faithful member, we have individually lost a valued and respected friend, and the community has lost a good citizen.

Dr. Fouts was born near Hagerstown, was a graduate of the Hagerstown High School and after attending Lebanon College, taught in the Wayne County schools for three years before studying medicine. After being graduated from the Central College of Physicians and Surgeons in Indianapolis in 1898, he spent a year in the Indianapolis City Dispensary, opened an office in Centerville in 1899 and moved to Richmond in 1916.

He served efficiently as health officer of Wayne County for two terms. During the World War he was a captain in the Army Medical Corps and since the war has retained a deep interest in the Medical Officers Reserve Corps, in which he attained the rank of major.

To his patients he was not only a physician but a trusted friend and advisor and throughout his thirty-seven years of professional life he exemplified a high standard of practice as a family physician.

We wish to record our own deep sense of personal loss and to extend to his family our sincere sympathy in their bereavement.

Your committee moves that this memorial be made a part of the minutes of this society, that copies of it be sent to Dr. Fouts' family, to the local press, and to THE JOURNAL of the Indiana State Medical Association.

**P**

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**BOOKS RECEIVED**

American Chamber of Horrors (Lamb). Farrar & Rinehart, Inc.	
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American Medical Profession, The (Shafer). Columbia University Press.	
---	--

Biochemistry in Relation to Human Physiology, Fundamentals of (Parsons). William Wood and Co.	
---	--

Bright's Disease and Aterial Hypertension (Stone). W. B. Saunders Co.	
---	--

Certified Milk American Assn. of Medical Milk Commissioners, Inc.	
---	--

Chemistry, Principles of (Roe). The C. V. Mosby Co.	
---	--

Colwell's Daily Log for 1937. Colwell Pub. Co.	
--	--

Contraception, Technique of (Matsner). Williams & Wilkins Co.	
---	--

Council on Pharmacy and Chemistry of the A. M. A., Annual Reports. American Medical Association.	
--	--

Diabetic Manual (Bortz). F. A. Davis Co.	
--	--

Diet, The Balanced (Clendening). D. Appleton-Century Co.	
--	--

Diagnosis, Examination of the Patient & Symptomatic (Mur-ray). C. V. Mosby Co.	
--	--

Diagnosis of Main Symptoms, An Index of Differential (French). William Wood and Co.	
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Disability Evaluation (McBride). J. B. Lippincott Co.	
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Doctors, For and Against (Hutchison & Wauchope). Wm. Wood & Co.	
---	--

Endocrinology in Modern Practice (Wolf). W. B. Saunders Co.	
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Examination of the Patient and Symptomatic Diagnosis (Mur-ray). C. V. Mosby Co.	
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- Examiner, The Successful (Scaton). Rough Notes Co.
- Eye and Its Disease, The (Berens). W. B. Saunders Co.
- Gall Bladder Disease, Medical Treatment of (Rehfuss & Nelson). W. B. Saunders Co.
- Foods, Facts About Commercially Canned (American Can Co.).
- Glandular Physiology and Therapy (Council on Pharmacy & Chemistry of the A.M.A.). The American Medical Assn.
- Goiter and Its Medical Treatment, Exophthalmic (Bram). The C. V. Mosby Co.
- Harvey Lectures, The. The Williams and Wilkins Co.
- Heart Disease and Tuberculosis (Knopf). The Livingston Press.
- Heart Disease, Clinical (Levine). W. B. Saunders Co.
- Heart and Arteries, Synopsis of Diseases of the (Hermann). The C. V. Mosby Co.
- History, Medical of Sullivan County, Indiana (Maple). Sullivan Union Press.
- Immunology (Sherwood). The C. V. Mosby Co.
- Index of Differential Diagnosis of Main Symptoms, An (French). William Wood and Co.
- Infant Nutrition (Marriott). The C. V. Mosby Co.
- International Clinics. Vol. IV, 45th series, 1935. J. B. Lippincott Co.
- International Clinics (Hamman). Vol. III, 46th series, 1936. J. B. Lippincott Co.
- Laboratory Methods, Synopsis of Clinical (Bray). C. V. Mosby Co.
- Materia Medica and Pharmacology, An Introduction to (McGuigan & Brodie). The C. V. Mosby Co.
- Mayo Clinic and the Mayo Foundation, The Collected Papers of the (Hewitt, Potter & Neveling). W. B. Saunders Co.
- Medical Clinics of North America. W. B. Saunders Co.
- Medicine, Aids to (Livingstone). William Wood and Co.
- Medicine, Practice of (Meakins). C. V. Mosby Co.
- Mentally Ill, Principles and Practice of Recreational Therapy for the (Davis & Dutton). A. S. Barnes & Co.
- Microbiology and Pathology for Nurses (Carter). The C. V. Mosby Co.
- Modern Home Medical Adviser (Fishbein). Doubleday, Doran and Co.
- Modern Treatment in General Practice (Wakely). Wm. Wood & Co.
- National Formulary, The (Comm. on National Formulary). American Pharmaceutical Assn.
- New Pathways for Children with Cerebral Palsy. (Rogers & Thomas). The MacMillan Co.
- New and Non-official Remedies for 1936. American Medical Association.
- Nurses, Microbiology and Pathology for (Carter). The C. V. Mosby Co.
- Nursing, Pediatric (Zahorsky). The C. V. Mosby Co.
- Obstetrical Practice (Beck). The Williams & Wilkins Co.
- Obstetrics, A Textbook for Use of Students and Practitioners, Williams' (Stander). D. Appleton-Century Co., Inc.
- Obstetrics, A Textbook of (Schumann). W. B. Saunders Co.
- Oral Diagnosis and Treatment Planning (Thoma & Brackett). W. B. Saunders Co.
- Parathyroids in Health and in Disease, The (Shelling). C. V. Mosby Co.
- Parenteral Therapy (Dutton & Lake). Charles C. Thomas.
- Passive Vascular Exercises and the Conservative Management of Obliterative Arterial Diseases of the Extremities (Hermann). J. B. Lippincott Co.
- Pathology, Textbook of (MacCallum). The W. B. Saunders Co.
- Pathology for Nurses, Microbiology and (Carter). The C. V. Mosby Co.
- Patient and the Weather, The (Petersen). Edwards Brothers, Inc.
- Pharmacology, A Manual of (Sollmann). W. B. Saunders Co.
- Physiology of Love (Mantegazza). The Eugenics Pub. Co.
- Physiology, A Textbook of (Howell). W. B. Saunders Co.
- Physiology, Fundamentals of (Macleod & Seymour). C. V. Mosby Co.
- Psychiatry, Theory and Practice of (Sadler). The C. V. Mosby Co.
- Psychopathology, Essentials of (Henry). Wm. Wood & Co.
- Quacks (Warner). C. W. Warner.
- Recreational Therapy for the Mentally Ill, Principles and Practice of (Davis & Dunton). A. S. Barnes & Co.
- Respiratory Tract, Diseases of the. W. B. Saunders Co.
- Special Procedures in Diagnosis and Treatment, The (Hines). Stanford University Press.
- Surgery, Minor (Christopher). W. B. Saunders Co.
- Surgery, A Textbook of (Christopher). W. B. Saunders Co.
- Surgical Clinics of North America, Vol. 16, No. 1, Feb., 1936. W. B. Saunders Co.
- Surgical Clinics of North America, Vol. 16, No. 3, June, 1936. W. B. Saunders Co.
- Tuberculosis, Heart Disease and (Knopf). The Livingston Press.
- Weather, The Patient and the (Petersen). Edwards Brothers, Inc.
- Why Bring That Up? (Montague). The Home Health Library, Inc.
- Women, Diseases of (Crossen & Crossen). The C. V. Mosby Co.

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## COUNTY SOCIETY REPORTS

BOONE COUNTY MEDICAL SOCIETY met at the Ulen Country Club, Lebanon, November tenth, for a luncheon meeting. Dr. Claude A. Robinson, of Frankfort, presented a paper on "Diseases of the Eye." Nine members were present.

\* \* \*

CASS COUNTY MEDICAL SOCIETY members held a meeting at the Cass County Hospital in Logansport, October fifteenth. Dr. John Davis, of Logansport, presented a paper on "Complications in the Second and Third Stages of Labor." The paper was illustrated with moving pictures. Attendance numbered eighteen.

\* \* \*

CLARK COUNTY MEDICAL SOCIETY met at the Clark County Memorial Hospital in Jeffersonville to see Dr. J. B. DeLee's motion picture entitled "The Forceps Operation." The meeting was held November sixth. The picture is sponsored by the Indiana State Board of Health and the Bureau of Maternal and Child Health.

\* \* \*

DAVIESS-MARTIN COUNTY MEDICAL SOCIETY held its regular monthly meeting October twenty-seventh at the Davies County Hospital, with nineteen members in attendance. A motion picture on obstetrics was shown, and Dr. James B. Maple, of Sullivan, presented an address on the same subject.

\* \* \*

DEARBORN-OHIO COUNTY MEDICAL SOCIETY members held their regular monthly meeting October twenty-ninth in Aurora. After dinner, Dr. O. H. Stewart, of Aurora, reported on the South Bend meeting of the Indiana State Medical Association. Election of officers will be held at the next meeting.

\* \* \*

DELAWARE-BLACKFORD COUNTY MEDICAL SOCIETY met at Muncie, November seventeenth, for a dinner meeting at the Hotel Roberts. Twenty-seven attended. Short talks were made by members of the society who have attended clinics during the past summer. The following subjects were discussed: "The State Convention," by Dr. Tom Owens; "The College of Physical Therapy Meeting at New York," by Dr. Frank Hill; "Congenital Heart Diseases—Massachusetts General Hospital," by Dr. Forrest Kirshman; "Fractures—Massachusetts General Hospital," by Dr. Lester Mason.

\* \* \*

FAYETTE - FRANKLIN COUNTY MEDICAL SOCIETY met at the McFarlan Hotel in Connersville, October thirteenth. Dr. Clifford Straley, of Cincinnati, Ohio, spoke on "Treatment of Heart Diseases." Sixteen were in attendance.

At the November tenth meeting held at the McFarlan Hotel, Dr. Gordon Batman, of Indianapolis, was the principal speaker, his subject being "Recognition and Treatment of Congenital Deformities."

\* \* \*

FLOYD COUNTY MEDICAL SOCIETY met in New Albany, November thirteenth, for a dinner meeting. Dr. Samuel M. Baxter, of New Albany, presented a paper on "Glaucoma," which was discussed by Dr. W. F. Edwards. Nineteen were in attendance.

\* \* \*

FORT WAYNE (ALLEN COUNTY) MEDICAL SOCIETY met at the Fort Wayne Chamber of Commerce Building, November tenth, for a dinner meeting, with members of the St. Joseph County Medical Society as guests. Dr. Walter C. Alvarez, of Rochester, Minnesota, talked on "Helpful Hints in Diagnosing Atypical Types of Indigestion." Eighty-eight attended the meeting.

A dinner meeting of the Fort Wayne (Allen County) Medi-

cal Society was held at the Irene Byron Tuberculosis Sanatorium, near Fort Wayne, October twentieth. Dr. M. H. Draper was in charge of the program. Cases were reported. Attendance numbered fifty-two.

\* \* \*

FOUNTAIN-WARREN COUNTY MEDICAL SOCIETY met at Covington, November fifth, to hear Dr. W. D. Asbury present a paper on "Diagnosis and Treatment of Certain Heart Defects."

\* \* \*

GIBSON COUNTY MEDICAL SOCIETY met November ninth at the Emerson Hotel, Princeton, for a dinner meeting. Dr. Frank M. Gasticneau, of Indianapolis, presented a skin clinic, and discussed the treatment of the more common skin diseases. Cases were presented and interesting discussions followed. Attendance numbered twenty-two.

\* \* \*

GRANT COUNTY MEDICAL SOCIETY held a dinner meeting at the Hotel Spencer in Marion, October twenty-second. Dr. Edwin N. Kime, of Indianapolis, was the guest speaker. His subject was "Recent Developments in Physical Medicine and Electrosurgery."

\* \* \*

HENDRICKS COUNTY MEDICAL SOCIETY met at Crawley's Hall in Danville, October twenty-second. Dr. O. T. Scamahorn and Dr. Marjorie Morrison were speakers. Officers for 1937 were elected as follows:

President: Carl B. Parker, Danville.

Vice-president: Dr. Marjorie Morrison.

Secretary-treasurer: W. T. Lawson, Danville. Dr. Lawson was re-elected secretary-treasurer for the *forty-seventh* time.

\* \* \*

HAMILTON COUNTY MEDICAL SOCIETY members held a dinner meeting at the Legion hall in Sheridan, November tenth. Eighteen members attended.

\* \* \*

HENRY COUNTY MEDICAL SOCIETY met at the Henry County Hospital, October fifteenth. Dr. Rollin H. Moser, of Indianapolis, was the guest speaker. His subject was, "Treatment of Diseases of the Stomach."

At the September seventeenth meeting of the Henry County Medical Society, Dr. Charles P. Emerson, of Indianapolis, talked on "The Liver and Its Many Diseases."

\* \* \*

INDIANAPOLIS (MARION COUNTY) MEDICAL SOCIETY held its October twenty-seventh meeting at the Antlers Hotel. A discussion of protamine insulinate was presented by Drs. John H. Warvel and C. L. Rudesill.

At the November third meeting, principal speakers were Dr. P. E. McCown and Dr. A. S. Jaeger. National election returns were presented at the meeting over special wires.

Dr. H. S. Maitland, of Newark, New Jersey, was the speaker at the November tenth meeting of the Indianapolis Medical Society.

\* \* \*

JASPER-NEWTON COUNTY MEDICAL SOCIETY members met at the home of Dr. I. M. Washburn in Rensselaer, October twenty-ninth, to hear Dr. Roy Grinker, of Chicago, talk on "Infection of the Central Nervous System." Seventeen members attended.

\* \* \*

KNOX COUNTY MEDICAL SOCIETY met November seventeenth at Vincennes. Dr. Russell A. Sage, of Indianapolis, presented a paper illustrated with lantern slides, on "Diagnosis and Treatment of Common Sinus Conditions." Attendance numbered twenty.









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